# Usenet Newsgroup Archive: rec.radio.amateur.space

## 2010

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 2010-01-01 through 2010-12-26

Source text: rec.radio.amateur.space.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 123

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

## 1. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-01-01 07:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1262329201@panix.com>
Source record: 554
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

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Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
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Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 2. Radio Meteor Obs. Bull. December 2009 Geminids Ursids

Newsgroup: rec.radio.amateur.space
Date: 2010-01-07 19:28:19 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <ccdck59hhmkejkbuiiot96makg8tocsr6n@4ax.com>
Source record: 555
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 197 of December 2009 (99 K) is available now as

http://www.rmob.org/rmobtext/rmob0912.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 3. ANS-010 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-01-10 02:52:30 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000301ca919d$9b641180$d22c3480$@net>
Source record: 556
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-010

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* BoD Adopts Accepted Use Policy For AMSAT Mail Lists
* AO-51 Spacecraft Reorientation Planned in January
* AMSAT at the Cowtown Hamfest - 15 & 16 January 2010
* AMSAT Awards
* New Student Satellites Announced by India and University of Colorado
* How's Satellite DX?
* Final Call: Remember to Nominate SKN Best Fist

SB SAT @ AMSAT $ANS-010.01
AMSAT Adopts Accepted Use Policy For AMSAT Mail Lists

AMSAT News Service Bulletin 010.01
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.01

The AMSAT Board of Directors unanimously adopted an Accepted Use Policy for the AMSAT Public Mailing Lists on January 5, 2010. This policy takes effect immediately and applies to all those using the AMSAT mailing lists.

Following the October 2009 AMSAT Board meeting Gould Smith, WA4SXM AMSAT VP of User Services appointed a committee to develop a use policy for the mailing lists. The members of the committee did an outstanding job of putting together a document that is acceptable to all the com-
mitte members and was passed without change by the BoD. Thank you to the committee members: Stephen Belter, N9IP; Alan Biddle, WA4SCA; Mark Hammond, N8MH; Samudra Haque, N3RDX; and Paul Williamson, KB5MU.

The policy has been added to the AMSAT Web site and will be included as part of the process when applying to join any of the AMSAT mailing

lists. The link to the PDF file can be found at: http://www.amsat.org

Acceptable Use Policy for the AMSAT Public Mailing Lists

Approved by the AMSAT BoD 5 January 2010

The AMSAT Bulletin Board (AMSAT-BB) public mailing list carries general AMSAT information and discussion. The purpose of this mailing list is to provide a forum for general discussion of any satellite-related topic.

The Space Amateur Radio Experiment (SAREX) public mailing list contains information and discussion pertaining to amateur radio operation on manned space missions, including the Space Shuttle, Mir (formerly), and the International Space Station. The name is left over from the Shuttle Amateur Radio Experiment (SAREX) aboard Space Shuttle flights. It is now mainly concerned with ARISS operations aboard the International Space Station.

There are also regional AMSAT public mailing lists (e.g., AMSAT-DC, AMSAT-Florida, and AMSAT-NE) and numerous private mailing lists (e.g., Board of Directors, Officers, AO-51 operations, etc.).

Anyone can read the messages posted on any of the public mailing lists, and many people from around the world do so. Our audience includes AMSAT members, board members, and officers. At any given time, the readers may also include amateur radio operators, shortwave listeners, minors, potential financial donors, potential launch providers, officials from other amateur radio and satellite organizations, officials from international space agencies, and equipment suppliers and manufacturers.

Since the archives of the public mailing lists are available on the AMSAT website, the contents of individual messages are easily found using common search engines. Because of this wide readership, AMSAT insists that messages posted on its public mailing lists conform to this Acceptable Use Policy (AUP).

Acceptable Content

We embrace diversity of opinions and values. In order to preserve a constructive environment, we do insist that messages contain appropriate content and are respectful of the members and readers of the list. All posts should include the author's first name and call sign, or full name if not currently licensed.

In general, messages for the AMSAT mailing lists should be related to amateur radio satellites. Examples of on-topic posts include:

+ Announcements of general interest, including but not limited to AMSAT news, meetings, satellite availability, and DXpeditions.

+ Technical discussions, including the physics of space flight, modulation techniques, satellite design, RF path loss calculations, noise figure, etc.

+ Inquiries and suggestions about choosing equipment, learning operating techniques, and troubleshooting problems.

+ Discussion of AMSAT plans and policies in ways that foster better understanding of the opportunities, trade-offs, and limitations that AMSAT faces, and constructive suggestions for improvement.

+ Posting of amateur radio satellite-related equipment and software available for sale.

Unacceptable Content

Strong disagreements on issues are inevitable, but the AMSAT mailing lists are not the place for exchanges which become spiteful, unproductive exchanges. If you must have a heated exchange, it should be conducted privately and not in public on a mailing list.

We define unacceptable content as anything that is:
+ Illegal
+ Insulting, abusive, harassing, or threatening
+ Knowingly false or misrepresentative

Enforcement of this AUP

Access to the AMSAT mailing lists is a privilege and not a right. While these rules cover most common situations, they cannot anticipate everything. Consequently AMSAT reserves the right to take any actions it deems appropriate to ensure these forums are not disrupted or abused.

Violators of this policy may be subjected to manual moderation or have their ability to post messages suspended. Violators may or may not be warned prior to enforcement.

If you feel that you've been unfairly blocked from the list, you may appeal your situation in writing to:

The Radio Amateur Satellite Corporation
Attention: AMSAT-BB
850 Sligo Avenue, Suite 600
Silver Spring, MD 20910

Your letter of appeal will be forwarded to the VP of User Services and the Director of Electronic Communications for consideration.

[ANS thanks the AMSAT-NA Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-010.02
AO-51 Spacecraft Reorientation Planned in January

AMSAT News Service Bulletin 010.02
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.02

AMSAT-NA VP Operations, Drew KO4MA says AO-51 is back in to it's
normal configuration between January 4 - January 31:

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM (570 mw)

9k6 BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM (450 mw)

Sometime in early January the AO-51 Operations Team plans to use
the reversible magnet to reorient the spacecraft to the normal
polarity favoring the northern hemisphere.

Toward the end of January 2010 the schedule may allow for L/U voice
configuration on the 435.150 downlink between telemetry collections.
The AO-51 schedule will be updated when this mode becomes available:
http://www.amsat.org/amsat-new/echo/CTNews.php

Please address all AO-51 inquiries to the Operations Committee via
ao51-modes@amsat.org.

[ANS thanks the AO-51 Operations Team for the above information]

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SB SAT @ AMSAT $ANS-010.03
AMSAT at the Cowtown Hamfest - 15 & 16 January 2010

AMSAT News Service Bulletin 010.03
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.03

Keith, W5IU reports that AMSAT will have a strong presence at the
Cowtown Hamfest in Fort Worth, TX, on 15 and 16 January 2010. AMSAT
will maintain a booth both days of the event.

Also Douglas Quagliana, KA2UPW/5, will have two hours of forum time
on Saturday afternoon to present an "Introduction to Amateur Radio
Satellites" and monitoring the health of satellites by capturing and
decoding telemetry. Douglas is very knowledgeable in both of these
areas and is an excellent speaker.

Live demonstrations of communications through the current satellites,
including the new ones, will take place on both days.

This Hamfest is sponsored by the Lockheed Martin Amateur Radio Club.
Additional details are available at: http://www.cowtownhamfest.com/

[ANS thanks Keith, W5IU for the above information]

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SB SAT @ AMSAT $ANS-010.04
AMSAT Awards

AMSAT News Service Bulletin 010.04
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.04

AMSAT Director Contests and Awards, Bruce KK5DO says congratulations are in order for these satellite operators earning awards this month:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

Luis Benvenutty, WP4NYY
Anotnio Barbieri, I0JOW

The following have earned the South Africa Communications Achievement Award:

Neven Nrdljas, 9A5YY #US140
Kent Frazier, K5KNT #US141

The following have earned the W4AMI Achievement Award (for 1000 contacts):

David Webb, KB1PVH #59

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-010.05
New Student Satellites Announced by India and University of Colorado

AMSAT News Service Bulletin 010.05
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.05

A new Amateur Radio Satellite from India, named StudSat (STUDent SATellite) is slated for a March 2010 launch and will carry a camera capable of 90 metre resolution which will be used to perform the function of a remote sensing satellite and take images of earth's surface.

The satellite resembles a small cube of size (10 cm x 10 cm x 13.5 cm), weighing about 850 gm and has a volume of 1.1 litres. The satellite is intended to be launched in 700 km Sun-synchronous orbit on an Indian launcher. StudSat plans to use a 10mW CW beacon on UHF and also a half duplex 9k6 or 4k8bps FSK TC/TLM link with 1 watt output also on UHF. This satellite has been coordinated by the IARU but the only frequency

information available at this time states that 437 MHz will be used.

Further information on StudSat can be found at
http://www.teamstudsat.com/

The University of Colorado at Boulder has been awarded $840,000 from the National Science Foundation for students to build a tiny spacecraft to observe energetic particles in space that should give scientists a better understanding of solar flares and their interaction with Earth's atmosphere.

Scheduled for launch in 2012, the three-year grant to CU-Boulder's Laboratory for Atmospheric and Space Physics and the aerospace engineering sciences department involves the development of a 5-pound, loaf of bread-sized spacecraft carrying a miniature instrument package to observe energetic particles tied to "space weather" in the near-Earth environment. This satellite has been coordinated by the IARU but no specific frequency information is available at this time.

[ANS thanks SouthGate Amateur Radio News for the above information]

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SB SAT @ AMSAT $ANS-010.06
How's Satellite DX?

AMSAT News Service Bulletin 010.06
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.06

On January 8, 2010 Piraja, PS8RF worked Andre, ZS2BK via AO-7 (Mode B) in a footprint limit 34 second time window. The distance between the stations was 7694 Km. See the sound/video in youtube:
http://www.youtube.com/watch?v=zNFmHERisWQ

On AO-51 Piraja reports additional satellite DX with several contacts with Hugo, EA8HB on Las Palmas Island with strong signals. On January 6 Piraja heard the N1EL calling him, which is 5579 Km from him.

On January 4 Bob, W7LRD copied 2E1EUB and MM5AJW on an AO-7 pass. Bob said it was the first time I heard anything other that Mika, OH8MBN. He invites European stations help him to stretch the AO-7 footprint.

Mineo Wakita, JE9PEL reported FO-29 should come out of the eclipse soon. JARL continues to test the satellite and an operating schedule may be announced soon.

Dave, KB1PVH noted this week that Perry, WB8OTH has now reached 6000 QSOs on the satellites. Nice job!

SA-AMSAT says SumbandilaSat has reduced its power level to 2.5 watts to conserve power for other operations related to the primary mission.

Initial reports from stations in Australia indicate that the reduction was hardly noticeable and that the signals remain stronger than most other amateur radio satellites. The SO-67 schedule is published on-line at http://www.amsatsa.org.za.

The DX Newsletter DXNL 1657 - Jan 6, 2010 reported that XR9JA will be the callsign of Luis, XQ5CIE, Carlos, CE6UFF, Didier, F6DXE, and Dagoberto, CE5COX, from Jan 10-24 for their DXpedition to the Chilean naval base "Arturo Prat" on Greenwich Island belonging to the South Shetland Islands (AN-010). Operation will take place in CW, SSB, PSK31 on 160m-6m and via satellite on AO-51. Their QSL manager is CE5JA (direct or via bureau) and more information is available online at: http://www.ce5ja.cl

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-010.07
Final Call: Remember to Nominate SKN Best Fist

AMSAT News Service Bulletin 010.07
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.07

Many thanks to all who participated in Straight Key Night on OSCAR 2010. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Your nominee need not have the best fist of those you heard, but only of those you worked.

Please send your nomination to Ray at w2rs@amsat.org. A list of those nominated will be published in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, for those of you going to Cowtown, please keep in mind that when NASA puts a bunch of Holsteins into low earth orbit it will be the herd shot around the world.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 4. WSR-011 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-01-12 02:58:04 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001b01ca9333$193131b0$4b939510$@net>
Source record: 557
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-011.S1
WSR 011 Part 1 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S1
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning
```

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS

Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-011.S2
WSR 011 Part 2 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S2
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL

=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]

=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT

Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ

Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-011.S3
WSR 011 Part 3 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S3
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-011.S4
WSR 011 Part 4 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S4
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 5. ANS-024 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-01-24 17:26:10 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001001ca9d1a$4ae67c10$e0b37430$@net>
Source record: 558
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
AMSAT NEWS SERVICE
ANS-024

ANS is a free, weekly, news and information service of AMSAT North
America,
The Radio Amateur Satellite Corporation. ANS reports on the activities
of a
worldwide group of Amateur Radio operators who share an active interest
in
designing, building, launching and communicating through analog and
digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Phase-3E News From AMSAT-DL General Meeting
* Request for submision of articles for the SVHFS Conference
* Happy Birthday
* ARISS Status - 18 January 2010

SB SAT @ AMSAT $ANS-024.01
Phase-3E News From AMSAT-DL General Meeting

AMSAT News Service Bulletin 024.01
From AMSAT HQ SILVER SPRING, MD.
January 24, 2010
To All RADIO AMATEURS
BID: $ANS-024.01

Phase-3E News From AMSAT-DL General Meeting(1st English Translation)

Peter, DB2OS, informed the extraordinary general meeting at
10 October 2009 about Phase-3E. The mechanics of the satellite
are ready. Also many modules are mostly still at the developers.

Following the extraordinary general meeting there were celebrat-
ing a major milestone in the project. Mario, DL5MLO, showed the
data transfer between a in Germany produced engineering model of
the IHU-3 and a notebook with 400 bps PSK.

OM Dr. Karl Meinzer takes immediately some IPS commands to the
onboard computer enjoying to see the correct answer in the display
of the laptop. This is the core of the data communications for P3E
```

control and monitoring in flight.

So far there is only a prototype at basic layout of the last stand.
Due to various changes in the schematic and no longer available or
improved components all layouts will be revised or newly created.

The construction of the IHU-3, CAN-DO! Bus and the SDX at AMSAT-DL,
Phase-3E is now "ITAR-free", ie free of export restrictions in the
U.S. These modules were developed also as an aid by members of AMSAT-NA.

Launch costs

A satellite launch with the Ariane will cost about 3 million Euros. An
alternative to Ariane and Soyuz could be the new agency SpaceX. It was
talked about the possibilities for an inexpensive launch for P3E with
one of the Falcon 9 rockets. At present, the prices for a regular
Falcon-9
are outside the financial resources of AMSAT-DL. During the interview,
there were signs however, a vague possibility of how to reduce costs.
AMSAT-DL will continue to remain in contact with SpaceX.

The financing of launch costs would be done by the Mars P5A mission.
For the feasibility of P5A with costs of 10 million Euros for each
start and developing it was agreed with DLR the creation of a study.
The planned realization of the P5A Mission to Mars was between 2016 to
2018.

Alternative P5-Moon mission

Hartmut, DL1YDD, said that talks in September 2009 with the DLR at tech-
nical level took place. A lunar mission as an intermediate step to a
Mars
mission would be equipped with a probe in a 100-km orbit around the Moon

and possible in 2014.

The satellite design for the P5-Moon mission is, as the P5-Mars mission,

based on the P3D structure of AO-40. Further details will follow after
completion of the currently for six months pending DLR/AMSAT-DL-study
in spring 2010.

See also:
http://www.amsat-dl.org
http://www.p3e-satellite.org/
http://www.dlr.de
http://www.spacex.com/

[ANS thanks to Thomas Frey, HB9SKA, and the SouthGate Amateur Radio
News for the above information]

/EX

SB SAT @ AMSAT $ANS-024.02
Request for submision of articles for the SVHFS Conference

AMSAT News Service Bulletin 024.02
From AMSAT HQ SILVER SPRING, MD.
January 24, 2010
To All RADIO AMATEURS
BID: $ANS-024.02

Friends,
It would be very helpful if you're planning to present and/or submit a paper
for the 2010 SVHFS Conference to let us know. The deadline for submissions
is February 5th, so time is ticking but not out. The conference planners are
busy making preparations. So far we have open slots for the presentations on
both Friday and Saturday. Requests for presentation slots are being taken
now, please let us hear from you.

Call for Papers 14th Annual Southeastern VHF Society Conference April 23rd
and 24th, 2010 Morehead State University in Morehead, Kentucky

The Southeastern VHF Society is calling for the submission of papers and
presentations for the upcoming 14th Annual Southeastern VHF Society
Conference to be held at Morehead State Univeristy in Morehead, KY on April
23rd and 24th, 2010. Papers and presentations are solicited on both the
technical and operational aspects of VHF, UHF and Microwave weak signal
amateur radio. Some suggested areas of interest are:

Transmitters
Receivers
Transverters
RF Power Amplifiers
RF Low Noise Pre Amplifiers
Antennas
Construction Projects
Test Equipment And Station Accessories
Station Design And Construction
Contesting
Roving
DXpeditions
EME
Propagation (Sporadic E, Meteor Scatter, Troposphere Ducting, etc.)
Digital
Modes (WSJT, etc.) Digital Signal Processing (DSP) Software Defined Radio
(SDR) Amateur Satellites Amateur Television

In general papers and presentations on non weak signal related topics such
as FM repeaters and packet will not be accepted but exceptions may be

made
if the topic is related to weak signal. For example, a paper or
presentation on the use of APRS to track rovers during contests would be
considered.

The deadline for the submission of papers and presentations is February
5,
2010. All submissions for the proceedings should be in Microsoft Word
(.doc). Submissions for presentation at the conference should be in
PowerPoint (.ppt) format, and delivered on either a USB memory stick or
CDROM or posted for download on a web site of your choice.

Pages are 8 and 1/2 by 11 inches with a 1 inch margin on the bottom and
ï¿½
inch margin on the other three sides. All text, drawings, photos, etc.
should be black and white only (no color).

Please indicate when you submit your paper or presentation if you plan
to
attend the conference and present there or if you are submitting just
for
publication. Papers and presentations will be published in bound
proceedings
by the ARRL. Send all questions, comments and submissions to the
program
chair, Robin Midgett K4IDC via K4IDC at comcast dot net.

For further information about the conference please go to
<http://www.svhfs.org>www.svhfs.org

Thank you,
Robin Midgett K4IDC
2010 Program Chair, SVHFS

[ANS thanks Robin, K4IDC for the above information]

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SB SAT @ AMSAT $ANS-024.03
Happy Birthday

AMSAT News Service Bulletin 024.03
From AMSAT HQ SILVER SPRING, MD.
January 24, 2010
To All RADIO AMATEURS
BID: $ANS-024.03

Happy Birthday! Guess who turned 20 years old on January 22nd?

AO-16, DO-17, WO-18, and LO-19 !! :)

To honor the great work of AMSAT volunteers that created, built, and
launched the original "fleet of four" microsats exactly 20 years old, we
will be *attempting* to operate AO-16 in its special "voice mode"

on select passes during the period January 21-24. Operations will
be limited to stations that share the footprint with the command station
N8MH (grid FM05pj).

Mode FM Voice Repeater (Downlink is DSB. Operation is Intermittent)
Uplink: 145.9200 MHz FM
Downlink 437.0260 MHz USB and LSB

Please understand that because of the current orbit and a thermal issue
in
the spacecraft, the satellite turns itself OFF via a reset rather
unpredictably--sometimes only moments after being turned ON.
So operations may be limited to very short periods of times (barely
enough for quick exchange). During some passes it might not work at
all...but I'm willing to give it a shot.

Watch for AO-16 to be turned ON for operations during the following
dates
and times, posted below in UTC:

WinAos QTH: -78.7/35.4
---
Day Object AOS (U) LOS
---
21.01.2010 AO-16 19:02 19:16

22.01.2010 AO-16 08:56 09:10 <- (yes, that's 4am Eastern time
;)

22.01.2010 AO-16 20:10 20:25

23.01.2010 AO-16 08:25 08:40

23.01.2010 AO-16 19:39 19:54

24.01.2010 AO-16 19:09 19:23

24.01.2010 AO-16 20:49 21:02

Let's hope at least a few of you can make a contact! If nothing else,
you
can listen to the familiar "hmmmmm" of 1200BPSK and reminisce.

73,

Mark L. Hammond [N8MH]
AO-16 Command Station

[ANS thanks Mark, N8MH For the above information]

/EX

SB SAT @ AMSAT $ANS-024.05
ARISS Report

AMSAT News Service Bulletin 024.05
From AMSAT HQ SILVER SPRING, MD.
January 18, 2010
To All RADIO AMATEURS
BID: $ANS-024.05

Amateur Radio on the International Space Station (ARISS) Status Report
January 18, 2010

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was scheduled for Minato Junior High School in Hachinohe, Aomori, Japan on Friday, January 22 at 09:24 UTC. Students are learning about the goals of
the ISS as well as radio communications and are studying for their amateur
radio licenses.

Morioka Childrenï¿½s Museum of Science in Morioka, Iwate, Japan has been scheduled for an Amateur Radio on the International Space Station (ARISS)
contact with JAXA astronaut Soichi Noguchi, KD5TVP on Thursday, January 28
at 06:53 UTC. The youth are currently learning about the ISS, satellite orbits and amateur radio. The contact is expected to be conducted in Japanese.

2. Commander Jeffrey Williams and Taiwanese Youth Speak via ARISS Contact

On Monday, January 11, Expedition 22 Commander Jeffrey Williams, KD5TVQ participated in an Amateur Radio on the International Space Station (ARISS)
contact with students attending Humanity Primary and Junior High School (HPJHS), the first charter school in Taiwan. Joining in the contact were students from the Technology and Science Institute of Northern Taiwanï¿½s
Department of Computer and Communication Engineering. Six hundred guests attended the event, which was sponsored by the Chinese Taipei Amateur Radio
League (CTARL), and listened as Williams answered 15 questions about life in
space. Media coverage included six television stations and five newspapers.

3. Cosmonauts Participate in Two ARISS Contacts with Kursk University

On Saturday, January 16, cosmonauts Maksim Suraev and Oleg Kotov both participated in two Amateur Radio on the International Space Station (ARISS)
sessions with students and faculty of the Kursk State Technical University.
The sessions were held on successive ISS passes.

4. Astronaut Training Status

JAXA astronaut Satoshi Furukawa, KE5DAW received Amateur Radio on the International Space Station (ARISS) basic operations training as well as an ARISS program overview on January 13. Furukawa is training as an Expedition 28 crew member which is planned to launch in May 2011.

Two Amateur Radio on the International Space Station (ARISS) simulated contacts are planned with astronauts Doug Wheelock, KF5BOC and Shannon Walker, KD5DXB on Thursday, January 21. Wheelock and Walker will answer questions posed by students at the Manhattan Challenger Learning Center, New York, New York and the Challenger Learning Center of Alaska, Kenai, Alaska, respectively. Both astronauts are slated to fly with Expedition 24 in May 2010.

5. ARISS Audio in Podcast

On the NASA Do-It-Yourself Podcast Web site is an item about using Amateur Radio on the International Space Station (ARISS) contacts to record unique audio for use in a student built podcast. The blog provides additional information via links to the Teaching From Space ARISS Web page as well as the DIY Podcast Homepage. See:
http://blogs.nasa.gov/cm/blog/diyPodcastBlog

6. ARRL Articles on Record Number of ARISS Contacts

The American Radio Relay League (ARRL) ran a Web story on the record number of Amateur Radio on the International Space Station (ARISS) contacts held during 2009. ARISS delegate Rosalie White noted in the article that by yearï¿½s end, there was an increased interest in ARISS among U.S. schools as indicated by educatorsï¿½ queries and the increase in U.S. ARISS applications submitted. To view the article, go to:
http://www.arrl.org/news/stories/2010/01/12/11285/?nc=1

The story also ran in the ARRL Letter. See:
http://www.arrl.org/arrlletter/index.html?issue 10-01-14#toc04

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 6. WSR-029 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-01-29 14:22:03 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201caa0ee$65f2ec00$31d8c400$@net>
Source record: 559
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-029.S1
WSR 029 Part 1 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S1
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning
```

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS

Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-029.S2
WSR 029 Part 2 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S2
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL

=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]

=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT

Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ

Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-029.S3
WSR 029 Part 3 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S3
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-029.S4
WSR 029 Part 4 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S4
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 7. ANS-031 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-01-31 02:32:38 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000d01caa21d$a0f8c650$e2ea52f0$@net>
Source record: 560
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-031

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* 2010 OSCAR SKN "Best Fist" Winners
* ISS on SSTV This Week
* How's Satellite DX? Pretty Good, Thanks for Asking
* Sumbandila SO-67 Amateur Radio Operations Suspended
* Building the First US ARISSAT-1 Flight Unit Begins
* 8 New Cubesats in Development

SB SAT @ AMSAT $ANS-031.01
2010 OSCAR SKN "Best Fist" Winners

AMSAT News Service Bulletin 031.01
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.01

Ray Soifer, W2RS has compiled the Best Fist votes from AMSAT's Straight Key Night on OSCAR 2010 and reported the results this week. Ray said, "We saw a great deal of activity throughout the world, with 'Best Fist' nominations coming in from four continents." The following "Best Fist" winners, 23 in all, each received at least one nomination from someone they worked:

AA5PK, JA6SZV, JH7UJI, JO2ASQ, JR0EFE, K0RJS, N3TE, N3TL, N4ZQ, N5AFV, N7EQF, N9AMW, NR7Q, PV5AZ, PV8DX, PY2FFG, PY4ZBZ, WA5KBH, WA6ARA, WC7V, WD9EWK, 9A2EY, 9A5YY.

As some will remember, at one time we used to award a "grand prize" to the participant who got the most nominations. This was discontinued a few years ago, for fear of making the event too "competitive." However, we have to make an exception this year: Glenn Miller, AA5PK, received a record six nominations. Well done!

Many thanks to all who participated, and congratulations to all of
our "Best Fist" winners.

See you next year!

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-031.02
ISS on SSTV This Week

AMSAT News Service Bulletin 031.02
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.02

This week the 145.800 MHz downlink from the International Space Station
was active with the Slow Scan Television (SSTV) signals from the MAI-75
experiment. On Wednesday, January 27 automated SSTV operations were con-
ducted using the VC-H1 system transmitting a Robot-36 formatted picture
once every 3 minutes worldwide between 0900 to 1400 UTC. SSTV operations
on Thursday, January 28, and Friday, January 29 were conducted using the
PD-160 transmission format using MMSSTV and were generally focused toward
ground stations in western Russia.

SSTV images received by Amateur Radio Operators worldwide this week have
been uploaded to the ARISS SSTV gallery at:
http://www.amsat.org/amsat/ariss/SSTV/

The SSTV downlink on 145.800 from the ISS is transmitted in FM mode.
You can receive and decode these images at your station using freeware
software. You will need to connect the audio output from your 145.800
MHz receiver to an input on your computer's soundcard. Depending on your
radio and computer an audio interface may be required. Plans for these
are available via internet searches. Others have reported success by
simply connecting a speaker or headphone jack to their soundcard input
and adjusting levels using the soundcard driver program's audio slider
controls.

One widely used SSTV software program is MMSSTV available at:
http://mmhamsoft.amateur-radio.ca/ (MMSSTV 1.11G or later is recommen-
ded).

The downlink signal from the ISS on 145.800 MHz is generally very strong
and a full OSCAR class tracking system is not needed. Many Amateur Radio
operators are successful using a 2 meter vertical on the house roof.

Tracking information for those who do not have a tracking program can
be viewed on-line at:
http://www.amsat.org/amsat-new/tools/predict/satloc.php (and select the
ISS as the object to be displayed).

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-031.03
How's Satellite DX? Pretty Good, Thanks for Asking

AMSAT News Service Bulletin 031.03
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.03

+ January 16 - WC7V had a contact with RN1NW via AO-7 Mode B over a distance of 7659 KM. Kerry, WC7V said, "I have hoped to make this contact for over 30 years. The satellite was ascending at my QTH and was at about 3 degrees elevation at the end of our QSO."

+ January 18 - ZS6BB had a contact with EA6SA via AO-7 Mode B over a distance of 7,766 KM. This contact was conducted via SSB.

+ January 23 - N3TL and KL7XJ had a contact on HO-68 in FM. Tim, N3TL said, "At the time, the satellite was below 4.5 degrees and descending for me. I'm thrilled to put state No. 49 in the log with my handheld station."

+ January 24 - Piraja PS8RF had a contact with EA4CYQ in SSB via the linear transponder through HO-68. This is believed to be the first SSB contact between South America and Europe on this satellite over a distance 7,477 KM. Juan Antonio, EA4CYQ wrote, "After that I worked Canada VE2DWE and several USA stations KB1RVT, K3SZH and KC9ELU.

+ January 25 - K3SZH with PY2OV on SSB via AO-7. The distance between the two stations was 7738 KM. PS8RF recorded the contact and posted a short video at: http://www.youtube.com/watch?v=gS4Md1-P6X4

+ Schedule update for VP8 South Shetland Islands AO-51 operation. The DNXL Newsletter #1660 (Jan 27, 2010) reports that XR9JA will now be active between February 1 - 28. This operation was originally planned for January but has been re-scheduled. Their QTH will be the Chilean naval base "Arturo Prat" on Greenwich Island belonging to the South Shetland archipelago (AN-010). Their QSL manager is CE5JA (via bureau or direct) and more information can be found on their website: http://www.ce5ja.cl

+ FO-29 seems to be recovering well. On January 24 Rowland K4XD heard strong signals while copying his own CW signal with no one else on the satellite. On January 27 Mike, DK3WN reported strong signals received from FO-29.

+ January 28 - ZS6WB in Pretoria, South Africa copied a double-hop signal from I8CVS in Italy. Dom, I8CVS was uplinking to AO-7 on 432.158 MHz which translated out on 145.940 MHz on AO-7. The signal on 145.940 from AO-7 was received as an input on FO-29, and translated to 435.840 MHz output on FO-29. Hal, ZS6WB said he copied a good signal via 435.840 MHz for several minutes.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-031.04
Sumbandila SO-67 Amateur Radio Operations Suspended

AMSAT News Service Bulletin 031.04
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.04

The Sumbandila Satellite Operations at SunSpace in South Africa said this week that Amateur Radio Operations via SO-67 must be suspended temporarily due to system commissioning requirements of the main payload.

The message said after handover of operations of the commissioned payloads the Satellite Applications Center plans return SO-67 back to scheduled Amateur Radio operation in the middle-March to early-April, 2010 timeframe.

[ANS thanks Jan-Albert Koekemoer for the above information]

/EX

SB SAT @ AMSAT $ANS-031.05
Building the First US ARISSAT-1 Flight Unit Begins

AMSAT News Service Bulletin 031.05
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.05

Gould Smith, WA4SXM writing on behalf of the ARISSAT-1 team said construction of the flight unit begins next week when Tony Monteiro, AA2TX begins electronic assembly of the first US flight unit for ARISSat.

The ARISSAT-1 team has had prototypes working for months. The enclosures have been painted by NASA and the cables prepared by Larry Brown, N7LB. The flight boards were built by the Microchip ARISSat team and Chuck Green, N0ADI, with Chuck checking all the flight units.

Lou McFadin, W5DID has nearly assembled a complete flight structure designed by Bob Davis, KF4KSS. Lou expects to exhibit the structure in the AMSAT Booth at the upcoming Orlando HamCation. The first two flight TX/RX/Command receiver modules from Bill Ress, N6GHZ are due to arrive next week.

We just found out that ARISSat will receive a new callsign and some additional Russian greetings will be added. We will have more than 25 international greetings from around the world in twelve languages

broadcast on the FM downlink. In addition to the greetings will be voice ID, voice telemetry values, SSTV images, CW signals, new 1k BPSK signal by Phil Karn, KA9Q sending full telemetry and experiment data and a 16 kHz wide transponder. Kurst State University in Russia is providing the experiment and the Silver-Zinc battery for the mission.

The ARISSAT-1 team will start system testing and Flight Safety reviews soon and plans to ship two flight units to Russia in the spring.

[ANS thanks Gould Smith, WA4SXM and the ARISSAT-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-031.06
8 New Cubesats in Development

AMSAT News Service Bulletin 031.06
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.06

Four CubeSats from Japan are planned to launch on 20 May 2010 aboard the JAXA PLANET-C mission to Venus.

UNITEC-1, NPO UNISEC (University Space Engineering Consortium) will fly to Venus. This will provide Amateur Radio operators a deep space beacon for experimentation on 5.8GHz. More information is at: http://www.unisec.jp/unitec-1/en/top.html

Negai*", developed by Soka University will remain in low-earth orbit with a 437.305 MHz CW, Packet 1200bps FSK AX.25 downlink. More information is at: http://kuro.t.soka.ac.jp/main.html

WASEDA-SAT2, developed by Waseda University will remain in low-earth orbit with a 437.485 MHz CW(FM), PCM-FSK(FM) 9600bps downlink. More information is at:
http://www.miyashita.mmech.waseda.ac.jp/Waseda-Sat2/index.htm

KSAT, developed by Kagoshima University will remain in low-earth orbit with an uplink: S-band (2GHz, 10kbps) and downlink: Ku-band(13.275GHz, 10kbps/1Mbps). More information is at:
http://www.sci.kagoshima-u.ac.jp/~nishio/download/Ukaren2008Nishio.pdf

NASA plans to launch 3 CubeSats with Amateur Radio payloads. The satellites are manifested as an auxiliary payload on the Taurus XL launch vehicle for NASA's Glory Climate Mission, planned for liftoff in late November, 2010.

Montana State designated its satellite as Explorer 1 Prime, or E1P. The name honors the launch and scientific discoveries of the Explorer-1 mission, which detected the Van Allen radiation belts more than 50 years

ago. E1P will carry a miniature Geiger tube to measure the intensity and variability of the electrons in the Van Allen belts. This satellite will use 437.505 MHz as its downlink. See:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=116

Colorado's satellite is named Hermes. Its mission is to improve CubeSat communications through the on-orbit testing of a high data-rate communication system that will allow the downlink of large quantities of data. The planned downlink frequency is 437.425 MHz. See:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=104

The Kentucky vehicle is called KySat-1. KySat, is believed to be the first CubeSat to carry a 2m to 70cm FM repeater. It includes a camera to support a scientific outreach program intended for, but not limited to, Kentucky students in kindergarten through 12th grade. The satellite also has a 2.4 gigahertz industrial, scientific and medical band radio, which will be used to test high-bandwidth communications in the license free portion of the S-band. KySat-1 plans to use 145.850 MHz FM uplink and 436.975 MHz FM downlink. See:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=102

The Cape Peninsula University of Technology (CPUT) in South Africa F'SATI post graduate program in Satellite Engineering announced plans for the development of an academic project which will develop and launch a 3U cubesat. The payloads will include a camera, a parrot repeater and a transponder. In partnership with the Hermanus Magnetic Observatory, a HF beacon will be included to assist the HMO to calibrate their radar systems in the Antarctic. A new type of magnetometer is also under consideration. The project plans to have a flight ready display in October 2011 when the International Astronomy Conference is held in Cape Town.

[ANS thanks Mineo Wakita, JE9PEL; SouthGate Amateur Radio News for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind when the artist was questioned about his vehicle being stalled by the side of the road his reply was, "I had no Monet to buy Degas to make the Van Gogh."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

## 8. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-02-01 07:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1265007601@panix.com>
Source record: 561
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 9. Radio Meteor Obs. Bull. January 2010 Quadrantids

Newsgroup: rec.radio.amateur.space
Date: 2010-02-07 17:31:44 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <i6utm5981hp2khnd0l198vb2ijv0a6slh8@4ax.com>
Source record: 562
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 198 of January 2010 (92 K) is available
now as

http://www.rmob.org/rmobtext/rmob1001.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

Chris

## 10. WSR-044 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-02-15 15:11:56 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001501caae51$2e764f90$8b62eeb0$@net>
Source record: 563
Cross-posted to: rec.radio.amateur.space,rec.radio.info

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-044.S1
WSR 044 Part 1 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S1
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS
BID: $WSR-044.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 Mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 Mhz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02132010]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

STS-130 Crew:
Commander: George Zamka
Pilot: Terry Virts
Mission Specialist: Nicholas Patrick
Mission Specialist: Robert Behnken
Mission Specialist: Kathryn Hire
Mission Specialist: Stephen Robinson

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02132010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-044.S2
WSR 044 Part 2 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S2
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS
BID: $WSR-044.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 Mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 Mhz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02132010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]

=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT

Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ

Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

STS-130 Crew:
Commander: George Zamka
Pilot: Terry Virts
Mission Specialist: Nicholas Patrick
Mission Specialist: Robert Behnken
Mission Specialist: Kathryn Hire
Mission Specialist: Stephen Robinson

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.

[02132010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-044.S3
WSR 044 Part 3 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S3
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS
BID: $WSR-044.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater

Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB

K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
---
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826

Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]

=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-044.S4
WSR 044 Part 4 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S4
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS
BID: $WSR-044.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 11. ANS-045 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-02-17 17:05:16 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001501caaff3$585a0a10$090e1e30$@net>
Source record: 564
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-045

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* 36th Annual Eastern VHF/UHF Conference
* LORAN C Shutdown
* Arecibo Dish to be Activated on Amateur Radio EME
* W6ZH, Silent Key
* ARISS Status - 8 February 2010

SB SAT @ AMSAT $ANS-045.01
36th Annual Eastern VHF/UHF Conference

AMSAT News Service Bulletin 045.01
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.01

36th Annual Eastern VHF/UHF Conference

The 36th Annual Eastern VHF/UHF Conference will be on April 16-18, 2010 at the Crowne Plaza Hotel, Enfield, CT. The NorthEast Weak Signal Group (NEWS) is calling for the submission of papers and presentations. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio.

We will have a Hospitality Suite for early arrivals on Friday Evening starting at 7:00PM to 11:00 PM. Conference registration will begin on Saturday at 7:30 AM and talks and band sessions will start at 8:30 AM. A banquet dinner, Triva quiz and prize raffles will begin at 7:00 PM. On Sunday an outdoor flea market, weather permitting, will begin at 8:00 to 11:00 AM. Starting this year flea market admission will be FREE for both buyers and sellers of VHF and above relate equipment items only. Compliments of Greg WA1VUG and R&S we will have the following test capabilities up to 50 GHz.

Registration is now open for this years conference. A block of Hotel Rooms
is available at the Crowne Plaza, Enfield under the NEWS group for $99.
The latest conference news can be found on-line at:
http://www.newsvhf.com/vhfconf.html

[ANS thanks Bruce, N2LIV Conference Chairman for the above information]

/EX

SB SAT @ AMSAT $ANS-045.02
LORAN C Shut Down

AMSAT News Service Bulletin 045.02
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.02

LORAN-C shut down
On February 8 the U.S Coast Guard shut down the Loran-C a navigation
system that has been in use since World War II.

LORAN (LOng RAnge Navigation) made use of a network of Low Frequency
(LF) radio transmitters and the receivers used these multiple signals
to determine the location and speed of the vessel. It has served
mariners and aviators well for over 60 years.

President Obama has called the system obsolete, saying it is no
longer needed in an age in which Global Positioning System devices
are nearly ubiquitous in cars, planes and boats.

Running Loran-C is claimed to cost the Federal Government about
$38 million a year but shutting it down means there is no longer
a back-up system for GPS.

[ANS thanks Southgate news service for the above information]

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SB SAT @ AMSAT $ANS-045.04
Arecibo Dish to be Activated on Amateur Radio EME

AMSAT News Service Bulletin 045.04
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.04

Arecibo Dish to be Activated on Amateur Radio EME

While this item is not satellite related it may provide our ANS
readers with a unique opportunity to utilize modest UHF and 1296
stations to copy EME signals. A large OSCAR-class antenna array
equipped station may be able to participate.

Echoes of Apollo EME 2010 or World Moon Bounce Day, is scheduled for the weekend of April 16, 17, and 18. This year, EOA has been graced with a special opportunity to use the Arecibo Dish as the ultimate "big gun" station on 432 MHz SSB & CW. EME operation on 1296 MHz may also be possible. Arecibo has more than 50 dbi gain on 432 MHz so the team thinks it can be heard with modest equipment.

[ANS thanks the Echoes of Apollo project for the above information]

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SB SAT @ AMSAT $ANS-045.05
W6ZH, Silent Key

AMSAT News Service Bulletin 045.05
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.05

It is with much sadness that AMSAT notes the passing on Feb.4 of Herbert "Pete" Hoover III, W6ZH at his home in San Marino, CA. Pete was the grandson of former President Herbert Hoover. Pete's W6ZH call was inherited from his father who served as ARRL President; Pete's original call was W6APW. He was AMSAT Life Member #65.

In the 1970's, Pete and Bill Eitel (W6UF) saw that AMSAT and amateur satellites were a significant wave of amateur radio's future. In addition to making substantial contributions, they worked with the ARRL to form the ARRL Foundation in 1976. Beginning in 1978 Pete served on the ARRL Long Range Planning Committee.

I remember the hospitality Pete and his wife Meridith showed to Jan King (W3GET) and me on several occasions when we dropped by his home in San Marino to discuss AMSAT's future.

Pete was always very active in the American Red Cross. When the Pacsat concept was being developed, Harold Price (NK6K) and I called on Pete at the Hoover Foundation offices to discuss the concept of a store-and-forward messaging satellite to provide medical communications to a remote area. At Pete's instigation, we began working with VITA (Volunteers in Technical Assistance) and our Pacsat concept bore fruit when UoSAT-3 was re-badged as Healthsat-1
(see http://space.skyrocket.de/doc_sdat/healthsat-2.htm).

I last saw Pete at Dayton two years ago. I was in the chow line when I heard a "Hey Tom" from a nearby table. Pete was spending most of his time at his retirement home on Maui and he looked very fit and had an incredible tan! While I was munching on a hamburger we has a great face-to-face QSO. He told me that he was still on the air, now using an Elecraft radio.

I'll miss Pete's enthusiasm and friendship. I could always count on
his thoughtful advice.

73 de Tom, K3IO (ex W3IWI)

/EX

SB SAT @ AMSAT $ANS-045.06
ARISS Status - 8 February 2010

AMSAT News Service Bulletin 045.06
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.06

1. Astronaut T. J. Creamer Enjoys ARISS Contact with Riley Ave.
Students

On Tuesday, February 2, astronaut Timothy Creamer, KC5WKI spoke with
Riley Avenue Elementary School students through an Amateur Radio on
the International Space Station (ARISS) contact. The Calverton, New
York youth spent weeks preparing for the contact, studying space and
the solar system during Science and creating rockets and robots in Art
class. The Peconic Amateur Radio Club helped coordinate the contact
and provided the equipment used. A Riley fourth grader and newly lic-
ensed ham acted as the control operator during the contact.

2. Principal has Good Memories of First ARISS Contact

The first Amateur Radio on the International Space Station (ARISS)
contact was held between Bill Shepherd on the ISS and students attending
Burbank School in Burbank, Illinois on December 21, 2000. Recently Bur-
bank's principal made the comment, "I continue to feel that the contact
and the follow-up visit were by far my best experiences as an educator,"
which says much about the program and its effect on those who participate.
The school continues to display a plaque commemorating the ARISS event in
its lobby.

3. ISS Ham Debrief Held with Frank De Winne

Expedition 20/21 astronaut Frank DeWinne, ON1DWN participated in an
Amateur Radio on the International Space Station (ARISS) debrief session
on Thursday, February 4, 2010. The feedback provided will help ARISS
update program operations.

4. ARISSat-1 Status Report Posted

AMSAT (Radio Amateur Satellite Corporation) posted an article on the
status of ARISSat-1. To view "Building the First US ARISSAT-1 Flight
Unit Begins," see: http://www.amsat.org/amsat-new/index.php

/EX

In addition to regular membership, AMSAT offers membership in the
President's

Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

## 12. ANS-052 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-02-21 06:00:05 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000101cab2a2$5af481e0$10dd85a0$@net>
Source record: 565
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-052

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat Design Review Held
* Satellite DXpeditions Coming Soon: K4T & Hawaii
* AO-27 Schedule Lister Updated
* College Satellite Night First Thursday Each Month
* Satellite and Space Shorts From All Over
* AMSAT - SUNY Binghamton - IBM NextGen CubeSat Development Report

SB SAT @ AMSAT $ANS-052.01
ARISSat Design Review Held

AMSAT News Service Bulletin 052.01
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.01

Members of the ARISSat team from AMSAT, NASA and Microchip held a Design Review in Orlando Monday and Tuesday February 15-16, 2010. There were 23 presentations describing the operation, status and testing of the major areas of the satellite. Many of the members used their holiday and vacation time to participate in a 12 hour session on Monday and 9 hour session on Tuesday before heading home.

The meeting was very successful in identifying areas that need additional work and definition. The major items to work on are the Max Power Point Tracker, the ICB (Interconnect Board), working on making a warmer environment for the battery, power management software and IHU software.

The prototype structure was on display and additional structures are being built. We have nearly all the flight electronics built and checked. The next challenges are developing test plans and

coordinating with NASA for thermal, vacuum and vibrations tests.
We will not be able to deliver an operational and vetted satellite
in March and are in discussion about a launch and EVA date later
this year.

The presentations in PDF format will shortly be available on the
arissat.org site under Design Review.

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-052.02
Satellite DXpeditions Coming Soon: K4T & Hawaii

AMSAT News Service Bulletin 052.02
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.02

K4T DXpedition
--------------
The K4T DXpedtion to EL84 web page (http://aroadventures.org/) says
the team plans to include satellite operations. The DXpedition dates
are March 11-15, 2010. Team Leader for K4T, Mike Forsythe, AC2V says,
"One of the primary stations will be dedicated to satellite operations
on a 24 hour basis. Mark Hammond, N8MH will be heading up K4T satellite
operations. K4T will be using batteries, solar power, and wind power.
It's a completely 'green' operation".

Mike, AC2V said, "The satellite station plans to work FM, SSB and per-
haps a bit of CW. We have requested that the secondary repeater on AO51
be dedicated to K4T. As for equipment, at the primary station we are
going to have redundant Icom 910 transceivers, Yaesu G-5500 rotor, LVB
Tracker, ARR preamps and M2 CP yagi antennas and will be running SATPC32.
We also have the option of portable operations with a Yaesu FT-817 with
an Elk antenna."

Mark, N8MH said, "We're going to have a top-notch satellite station!
You can expect us to be active on AO-7, AO-27, FO-29, SO-50, AO-51,
VO-52, SO-67, and HO-68 (depending on the mode schedules of the satel-
lites, of course)." In order to make it easiest to catch K4T this list
of target frequencies is planned to be used as a starting point:

Target Frequencies for K4T 11 March - 15 March 2010:
Satellite Downlink Uplink
--------- ------------ -------------
AO-7 145.960 USB 432.136 LSB
AO-27 436.795 FM 145.850 FM
FO-29 435.860 USB 145.940 LSB
SO-50 436.795 FM 145.850 FM
AO-51 435.150 FM 145.880 FM (primary)

AO-51 435.300 FM 145.920 FM (secondary)
VO-52 145.910 USB 435.240 LSB
HO-68 435.760 USB 145.930 LSB

Oahu BL11 and Kauai BL01 and BL02
---
Adrian, AA5UK, will be on Oahu (BL11) and Kauai (BL02ic & BL01) from March 24th through April 7th operating portable KH6. He plans to operate on the Linear and FM satellites during his stay, mostly from his rented house in BL02ic (March 27th through April 5th) and will try to operate portable/mobile from BL11 and BL01 time permitting. Emphasis will be SSB on FO-29, VU-52, AO-7 and HO-68. Adrian will post daily availability via AMSAT BB, QRZ.com: http://www.qrz.com/db/aa5uk, and Twitter: @AA5UK. Sked requests are encouraged due to the limited pass windows for those operators needing HI for WAS at the fringe of the footprints. Please use the email listed on QRZ.com to arrange for a time and date.

AMSAT DXpedition Loaner Gear
---
As a reminder, AMSAT has two Arrow antennas, and a TH-D7 available for loan to any member going on a DXpedition, or grid trip. This is the same gear used to activate K5D last year about this time. The D7 is programmed with Alpha-Memory tags for the FM satellites and has both rechargeable and AA battery packs, and is very simple to use. Contact Drew, KO4MA (ko4ma@amsat.org) if you have a need to use it.

[ANS thanks Mike, AC2V; Mark, N8MH; Adrian, AA5UK; and Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-052.03
AO-27 Schedule Lister Updated

AMSAT News Service Bulletin 052.03
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.03

A new schedule was uploaded to AO-27 on February 9. The ON-OFF timing of AO-27 may be out of sync with your prior expectations.

George, KA3HSW reminds users of the AO-27 Java schedule lister to make sure that you have updated your data files! (File menu, Update Data or hit CTRL U)

The AO-27 schedule lister is available to download at http://sites.google.com/site/ao27satellitescheduler.

[ANS thanks George, KA3HSW for the above information]

/EX

SB SAT @ AMSAT $ANS-052.04
College Satellite Night First Thursday Each Month

AMSAT News Service Bulletin 052.04
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.04

College Satellite Night is planned for all available satellites on the first Thursday of each month. These are a monthly event! College club stations plan on being on birds AO51, SO50, AO7, VO52, HO-68 and FO-29. Welcome the student operators and enjoy your QSOs with them as we are planning on creating an award for working college club stations on satellite. Mark your calendar and spread the word to college hams/club stations that you know!

[ANS thanks Dr. Jay Garlitz, AA4FL, Faculty Advisor for the Gator Radio Club at the University of Florida for the above information]

/EX

SB SAT @ AMSAT $ANS-052.05
Satellite and Space Shorts From All Over

AMSAT News Service Bulletin 052.05
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.05

Hams like science so here we go ...

+ Spectacular SRB Videos from STS-130 Provide Night-time Shuttle Launch can be viewed on-line at: http://tinyurl.com/yknofyh This launch video taken from the perspective of a camera mounted on the space shuttle's solid rocket boosters. [UniverseToday]

+ Watch Time-Lapse of EVA-1/Tranquility Node Berthing at: http://tinyurl.com/ycsa4r7 A shorter time lapse video clip of the berthing can be viewed at: http://tinyurl.com/y9lxyhk [UniverseToday]

+ A collection of photos from the STS-130 mission can be found on-line at: http://tinyurl.com/ydnugtl [UniverseToday]

+ An animation of a trip to Mars can be viewed at the One Minute Astronomer web page: http://tinyurl.com/ycdut88

+ Matthias, DD1US has updated his "Sounds from Space" collection at http://www.dd1us.de with recently received information about early AMSAT satellites. He would like audio files from early satellites AO-2 thorough AO-5 if you have them available.

+ Watch for Paul, 2M1EUB operating on the satellites from Scotland starting on March 20, 2010 for 7 days (Grid IO87mc). QSL via home callsign 2E1EUB.

+ Congratulations to Clint Bradford, K6LCS for a successful satellite demonstration at the Desert Rats Amateur Radio Club on February 16. Clint says about twenty folks showed up for the 5:37PM PST pass of AO-51. The main meeting and presentation started at 7PM to a packed house. Clint's web page is at: http://www.work-sat.com

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-052.06
AMSAT - SUNY Binghamton - IBM NextGen CubeSat Development Report

AMSAT News Service Bulletin 052.06
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.06

NextGen CubeSat Program Manager, Alex Harvilchuck, N3NP has provided an update on AMSAT's cooperative CubeSat development project working with senior class engineering students at the State University of New York at Binghamton (SUNY) and the IBM Research Center.

Using the ARISSat Power Supply Unit as a baseline design the backplane and Solar Panel Charge Controller designs have been redesigned to use Pseudocapacitors instead of traditional batteries. Based on a worse-case, 600km orbit, the student design can produce a whole-orbit power budget of 7.5 watts using a 3U CubeSat design. Analysis has shown if a spacecraft is launched into a more optimal orbit, like a sun-synch-ronous orbit, one of the two Pseudocapacitor banks can be removed. The design can be scaled to be used with other classes of spacecraft (2U/1U CubeSat, or Microsats). The design has gone through two reviews with AMSAT Engineering including Lou W5DID, Barry WD4ASW & Tony AA2TX.

A second student engineering team has designed a light-weight deploy-able solar panel design with integral magnetorquer coils for attitude control. The design will produce about 12-15 watts per minute in any orientation (worse-case) for 3U, less with 2U or 1U. If a spacecraft is launched into a more optimal orbit the number of solar cells can be reduced while maintaining the power budget

Alex also reported that the students have analyzed the existing AMSAT spacecraft modules (from ARISSat & P3D) and determined that they can fit the SDX and U/V Linear Transponder systems from ARISSat into a 2U or 3U CubeSat Chassis without significant re-design. If the ARISSat boards were redesigned/repackaged they could fit within a 1U Chassis.

The Internal Housekeeping Unit is going to be slightly redesigned to incorporate the Command Decoder board functions. The base concepts from

P3D for the Sun & Earth Sensor Systems are reusable in the NextGen satellite.

Alex concluded, "The NextGen Satellite R&D, sponsored by AMSAT, is being performed by Engineering Students for their Senior Design projects. We have 8 Mechanical Engineers and Electronic Engineers plus 26 Systems Engineering students. So I encourage everyone to contribute what you can to AMSAT to help fund spacecraft systems development and launch opportunities. If we have reliable, lower-cost, modular systems, then AMSAT can be more responsive to any launch opportunity.

We'll have more info on the research we're doing in the next issue of the Journal and look for us at the AMSAT table in Dayton!

[ANS thanks Alex Harvilchuck, N3NP for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, having recently observed President's Day in the USA please keep in mind that when George Washington cut down the cherry tree he could not tell a lie because he ate all the cherries, got cherry juice on his hands and got caught red handed.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

## 13. pre aMP

Newsgroup: rec.radio.amateur.space
Date: 2010-02-23 15:14:08 UTC
From: bcon1 <bcon1@telus.net>
Message-ID: <4hSgn.69102$PH1.27874@edtnps82>
Source record: 566

```
Application to look at this cluB
```

## 14. Re: pre aMP

Newsgroup: rec.radio.amateur.space
Date: 2010-02-23 17:25:29 UTC
From: bcon1 <bcon1@telus.net>
Message-ID: <dcUgn.69108$PH1.11102@edtnps82>
Source record: 567

Inductiojns being what they are, -You're in,

"bcon1" <bcon1@telus.net> wrote in message
news:4hSgn.69102$PH1.27874@edtnps82...
> Application to look at this cluB
>

## 15. Re: pre aMP

Newsgroup: rec.radio.amateur.space
Date: 2010-02-26 02:47:04 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <XZWdnRcRn6e0qxrWnZ2dnUVZ_hidnZ2d@posted.localnet>
Source record: 568

yes
---

Application to look at this cluB

## 16. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-03-01 07:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1267426800@panix.com>
Source record: 569
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 17. ANS-059 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-03-02 15:31:16 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701caba1d$5d5b1a70$18114f50$@net>
Source record: 570
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-059

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Amateur Satellite Presentation at Edison Amateur Radio Network Meeting
* AMSAT Activities at the Greater Houston Hamfest
* AMSAT Preparing for Hamvention 2010
* Indonesian Amateur Radio Satellite update
* ARISS Status - 22 February 2010

SB SAT @ AMSAT $ANS-059.01
Amateur Satellite Presentation at Edison Amateur Radio Network Meeting

AMSAT News Service Bulletin 059.01
From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.01

[Note: times listed are for the local Pacific time zone]

AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his 'Working Amateur Satellites With Your HT' multimedia session at the March 3, 2010 meeting of the Edison Amateur Radio Network. All are welcome to attend.

"Tentatively, we have a pass of AO-51 at 5:40PM before the meeting," Clint reports. "I'll be working the satellite from the AQMD parking lot if you'd like to show up a few minutes early."

The club meets at the Diamond Bar AQMD building,
21865 Copley Drive, Diamond Bar
CA 91765 - close to the 57/60 freeway interchange. Meeting starts at 6PM.

Attendees are encouraged to download Clint's four-page tutorial and radio programming matrix before the meeting from ...

http://www.work-sat.com

And Clint welcomes pre-presentation questions - call him at
909-241-7666,
or send email to ... clint@clintbradford.com

/EX

SB SAT @ AMSAT $ANS-059.02
AMSAT Activities at the Greater Houston Hamfest

AMSAT News Service Bulletin 059.02
From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.02

Greater Houston Hamfest 2010 in Rosenburg, TX will feature an AMSAT booth, technical presentation and satellite demos. Second prize drawing at Hamfest will be for Kenwood F6A HT with Arrow antenna and duplexer. Allen Mattis N5AFV & Andy MacAllister W5ACM are organizing the AMSAT activities. Listen for special event callsign, KK5W.

/EX

SB SAT @ AMSAT $ANS-059.03
AMSAT Preparing for Hamvention 2010

AMSAT News Service Bulletin 059.03
From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.03

The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT Booth and activities. We are updating information about the AMSAT presence at Dayton on the AMSAT Web site, follow the left hand navigation to get to the AMSAT Hamvention area. Those wishing to stay with the AMSAT contingent and volunteering to work on booth setup/ take down or in the booth itself are invited to contact Martha to make your hotel reservations. Additional information about the hotel can be found under the Dayton Hotel 2010 link.

The Friday night AMSAT/TAPR Banquet will be at the same location as the last three years, the Kohler Banquet Center. The menu has been selected and posted on the AMSAT/TAPR Banquet 2010 link. TAPR will be selecting the speaker for the banquet this year. The team is looking forward to displaying AMSAT accomplishments, new merchandise and talking with our members during the May 14-16, 2010 event.

/EX

SB SAT @ AMSAT $ANS-059.04
Indonesian Amateur Radio Satellite update

AMSAT News Service Bulletin 059.04
From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.04

Wisnu Widjaja YBï¿½AZ brings the latest news on the two new Indonesian Amateur Radio satellites, LAPAN-ORARI and LAPAN-A2 which are planned to launch in 2011. ORARI is the Organisasi Amatir Radio Indonesia.

LAPAN-ORARI will carry a 5 watt output FM voice transponder with a 435.880 MHz uplink and 145.880 MHz downlink as well as an APRS Digi-peater on 145.825 MHz. It will also carry a green light laser for attitude determination.

It is planned to be launched from India into a 650km orbit with low (8 degree) inclination as a secondary payload with "Megha-Tropique".

LAPAN-A2 will use S band (non amateur frequency) for video surveil-lance and the amateur frequency 437.425 MHz for telemetry.

Wisnu Widjaja YBï¿½AZ was the responsible operator on the frequency coordination request for the two satellites submitted to the IARU Amateur Satellite Frequency Coordination panel which was approved on December 23, 2009.

Work on LAPAN-ORARI and LAPAN-A2 satellites is currently at the stage of assembly and testing of components.

More information is available on these satellites at
http://www.lapan.go.id
http://www.orari.or.id
http://www.amsat-id.net
http://lapantubsat.org
http://www.amsat.org.uk/iaru/finished.asp

Vice Secretary General and International Affairs Coordinator and IARU Liaison of ORARI, Wisnu Widjaja YBï¿½AZ said, "Hopefully this information
can be useful for the member of ORARI and amateur radio throughout the world about LAPAN ORARI and LAPAN A2 satellites.

[ANS thanks ORARI and the SouthGate Amateur Radio News for the above information]

/EX

SB SAT @ AMSAT $ANS-059.05
ARISS Status - 22 February 2010

AMSAT News Service Bulletin 059.05
From AMSAT HQ SILVER SPRING, MD.

February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.05

1. ARISS International Team Meeting Held

The monthly Amateur Radio on the International Space Station (ARISS) Team teleconference was held on Tuesday, February 16. A status was given on the Columbus module as well as ARISSat-1. The minutes have been posted. See: https://www.rac.ca/ariss/arisstel2010-02-16.htm

2. ARISS News on Amateur Radio Newsline

The February 19, Amateur Radio Newsline Report 1697 included one ARISS news item. The "Ham Radio in Space" article was about astro naut Ron Garan studying to obtain his amateur radio license. See: ftp://ftp.arnewsline.org/quincy/News/news.txt

3. ARISSat-1 Meeting Held

An ARISSat Design Review was held in Orlando, Florida on Monday and Tuesday, February 15 - 16. Thirteen members attended the meeting and gave 23 presentations concerning the status of ARISSat-1. A write-up on the meeting can be found on the AMSAT (Radio Amateur Satellite Corporation) Web site. Links to the presentations will be posted soon. See: http://www.amsat.org/amsat-new/index.php

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

## 18. WSR-060 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-03-02 15:35:36 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001e01caba1d$f3266c80$d9734580$@net>
Source record: 571
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-060.S1
WSR 060 Part 1 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S1
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning
```

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03012010]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11

Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-060.S2
WSR 060 Part 2 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S2
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL

=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03012010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]

=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT

Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ

Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-060.S3
WSR 060 Part 3 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S3
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-060.S4
WSR 060 Part 4 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S4
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 19. ANS-066 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-03-07 15:31:17 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cabe0b$336bc920$9a435b60$@net>
Source record: 572
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-066

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* East Coast APRS Satellite Launch 11 March!
* A new interference threat to the Ham Bands
* SK: Dave Toth, VE3GYQ
* AO-51 Survives Close Encounter With FORMOSAT-3
* A Self adjusting Orbit Scheme
* ARISS Update

SB SAT @ AMSAT $ANS-066.01
East Coast APRS Satellite Launch 11 March!

AMSAT News Service Bulletin 066.01
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.01

Likely visible over most of the mid-Atlantic; no specific launch time information received at press time. I don't see a launch time or any other info yet.

A sounding rocket with amateur satellite operating on 144.39 MHZ APRS will rise to 100 miles or so for an 8 minute mission. The rocket is the Hall 12.067.

The payload is called SOCEM/ADAMASat. There is a computer program and GUI to interface to your PC so you can grab the telemetry live. It is on: http://ssl.engr.uky.edu/adamasat_free_gui.exe

Bob, WB4APR said, "It's a one shot deal, so I'm gonna have a backup TNC and HYPERTERM collecting everything. ADAMASat is the Antenna Deployment and Mono-filament Actuator Satellite. It's a 2U CubeSat designed by Kentucky Space as part of SOCEM, the Sub-Orbital CubeSat

Experimental Mission. ADAMASat, which is scheduled to launch on Hall 12.067 out of Wallops Flight Facility on 11 March, will fly in space for roughly 8 minutes performing an engineering experiment and transmitting data down to Earth via APRS packets.

More information on ADAMASat is available at
http://ssl.engr.uky.edu/suborbital/adamasat

Kentucky Space is hereby releasing to the AMSAT-NA community the ADAMASat FREE GUI, a free 32-bit Windows binary for amateur radio operators in the Eastern United States who are interested in tracking ADAMASat on its launch day. The GUI is a standalone application and upon opening it on his/her computer, the HAM will be greeted with a popup window which explains the steps required to track the payload.

All that is needed is a Windows machine, a radio and TNC which can receive on 144.390 MHz, a serial or USB cable, and a suitable location. The GUI parses the APRS packets as they are received, graphing temperatures on-board the payload and reporting status of the mission in real-time. It also includes instructions on e-mailing the packet log to Kentucky Space to aid in post-processing, and a built-in aggregator for the official ADAMASatTwitter RSS feed.

Disclaimer: Kentucky Space provides the GUI "as is" without warranties of any kind, and shall not incur any liability for any damages connected to the use of the GUI.

[ANS thanks Bob, WA4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-066.02
A new interference threat to the Ham Bands

AMSAT News Service Bulletin 066.02
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.02

FCC to Permit Rescue Radio Robot in the 430 to 450 MHz Band

Reports initially carried in the February 26, 2010 edition of Amateur Radio NewslineT Report 1698, and on the QRZ.com website say the FCC has issued a waiver of the Part 90 rules to permit a company called Reconrobotics Incorporated to sell a remote controlled security robot that will operate in the 430 to 448 MHz band. This is spectrum that is primary to the Federal Radiolocation Service but also encompasses the Amateur Service weak signal, satellite and repeater subbands.

The waiver permits Reconrobitics to manufacture and sell a device called the Recon Scout. This is described as a device designed for state and local law enforcement and firefighting agencies, and security personnel in critical infrastructure industries. The Recon Scout

can be thrown, dropped, or launched into potentially hazardous areas and can provide real-time video to an operator located a safe distance away. Typical applications will include such things as checking a building prior to forced entry, searching vehicle undercarriages for explosives and searching for survivors in a burning structure.

The Recon Scout transmits the analog video signal to the operator on one of three six megahertz channels. These are 430 to 436 MHz, 436 to 442 MHz, and 442 to 448 MHz. Reconrobotics says that multiple channels are necessary in order to avoid interference during incidents where multiple Recon Scouts are in use, but that such situations should be rare.

The company's now approved proposal is that the first unit sold to a responding organization would operate on 442 to 448 MHz. That happens to be where thousands of ham radio repeaters operate. The 436 to 442 MHz version being sold only to entities that already own the 442 to 448 MHz version, and the 430 to 436 MHz version being sold only to entities that already own both of the others.

In approving the waiver, the FCC told Reconrobotics the Recon Scout will have to operate on a secondary basis where it cannot cause interference and is not protected from interference to all Federal users and licensed non-Federal users including radio amateurs. The FCC also warned prospective users that operation of the Recon Scout in an unauthorized manner will subject licensees to Commission enforcement action and license revocation. It also said that widespread improper use of the device could lead the Commission to stop granting or renewing Recon Scout authorizations.

[ANS thanks Amateur Radio NewslineT Report 1698 for the above information]

/EX

SB SAT @ AMSAT $ANS-066.03
SK: Dave Toth, VE3GYQ

AMSAT News Service Bulletin 066.03
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.03

SK: Dave Toth, VE3GYQ

AMSAT received the sad news of the passing of a friend this week noting the passing of Dr David Toth, VE3GYQ. Dave was the President Emeritus of Tucson Amateur Packet Radio (TAPR) Group. He was an early member of TAPR, a long time supporter of AMSAT and he gave of his time and talents to promote technical endeavors in Amateur Radio. Former AMSAT President Tom Clark, K3IO remembered Dave, "He was always a friend of AMSAT, giving up personal vacations to

help with the integration of AO-40 in Orlando. For many years, he was the glue that held TAPR together."

Former AMSAT Board Member, Bob McGwier, N4HY recalled that, "Dave was an important player in the earliest days of packet radio in that he helped promote packet and supported it with on the air hardware. As a board member and President of TAPR, he helped TAPR become the principal support for Open HPSDR, a project to promote the development of hardware and software for software defined radio use by Amateur Radio. He will be sorely missed by all who knew him."

Dr. Toth graduated from the University of Western Ontario Medical School in 1978. He practiced family medicine in London, Ontario but moved to the U.S. in 1993 to began a career in emergency medicine. He was a partner of Premier Health Care Services, in Dayton, Ohio, and worked at Lima Memorial Health System and St. Rita's Medical Center until the time of his illness.

[ANS thanks Tom Clark, K3IO; Bob Bob McGwier, N4HY; Steve Bible, N7HPR; ARRL, TAPR, and Amateur Radio Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-066.05
AO-51 Survives Close Encounter With FORMOSAT-3

AMSAT News Service Bulletin 066.05
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.05

AO-51 Survives Close Encounter With FORMOSAT-3

AMSAT-NA VP Operations, Drew KO4MA, received notification from the US Joint Space Operations Center, located at Vandenberg Air Force Base, California on Sunday, February 28 warning that AO-51 would have a close approach to another satellite, FORMOSAT 3-D, on Monday at 1056 UTC. This occurred over the Eastern US, with many stations on hand capable of receiving telemetry from AO-51 before and after the near miss. Drew said, "The predicted miss distance was 953 meters, which is over 3000 feet overall but the radial difference between the two orbits was only 39 meters."

Steve, W3HF noted, "Given the orbital uncertanties of both satellites, an orbit separated by only 39 meters could mean that distance may become eaten up rather quickly!"

In preparation for the close encounter, Drew shut off the S band transmitter and turned on the digital downlink at 2 watts, with telemetry transmitted every 5 seconds. The next morning, on March 1, Drew was able to post a message that AO-51 was alive and well, "It looks like we are

fine. A second warning email this morning from the Air Force called it even closer, but everything was working at LOS this pass."

FORMOSAT-3 is a constellation of satellites launched on April 15, 2006. It is a joint U.S.-Taiwanese project with major participants including the University Corporation for Atmospheric Research (UCAR), the National Science Foundation, the Naval Research Laboratory (NRL), the Air Force Research Laboratory (AFRL) on the U.S. side and the National Space Organization (NSPO) on the Taiwanese side.

[ANS thanks AMSAT-NA VP Operations, Drew KO4MA, and Steve, W3HF for the above information]

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SB SAT @ AMSAT $ANS-066.06
A Self adjusting Orbit Scheme

AMSAT News Service Bulletin 066.06
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.06

>From the IARU Amateur Satellite Frequency Coordination pages at http://www.amsat.org.uk/iaru/formal_detail.asp?serial=168

POPACS-RR a 2U cubesat will use self-contained, warm gas, propulsion system to adjust satellite's initial circular orbit of 450 km to eccentric orbit with apogee of 1500 km and perigee of 450 km.

Demonstrate use of 3D printing (a.k.a. rapid prototyping) for manufacturing small satellites. Measure flux of energetic particles in lower Van Allen Belt. Test radiation-hardened electronic components and high performance solar cells in high radiation environment over a period of five years. Test radiation hardened components for a Plug and Play satellite. Proposing a UHF downlink of 9k6 GMSK AX25 packet and also an S Band downlink of BPSK at 9k6 or 38k4. Planning a launch on the first flight of SpaceX Falcon 1E not earlier than May 2011 with a 45 deg inclination. Will apply for a FCC part 5 Experimental licence for this project.

IARU Amateur Satellite Frequency Coordination pages
http://www.amsat.org.uk/iaru/

73 Trevor M5AKA

/EX

SB SAT @ AMSAT $ANS-066.7
ARISS Update

AMSAT News Service Bulletin 066.07
>From AMSAT HQ SILVER SPRING, MD.

March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.07

Amateur Radio on the International Space Station (ARISS) Status Report
March 1, 2010

1. School Contact

Expedition 22 astronaut Soichi Noguchi, KD5TVP Participated in an
Amateur Radio on the International Space Station (ARISS) contact
with Hamasuka Junior High School in Chigasaki City, Kanagawa, Japan
on Thursday, March 4. This is a direct contact and was scheduled for
10:09 UTC. Noguchi is an alumnus of the school.

2. Timothy Creamer Chats with Doncaster Students via ARISS Contact

On Thursday, February 25, Timothy Creamer, KC5WKI spoke with Don-
caster Primary School students in Doncaster, Victoria, Australia
via an Amateur Radio on the International Space Station (ARISS)
contact. The connection was made through telebridge ground station
VK4KHZ in Queensland. Two hundred fifty guests attended the event
and watched as the students asked nineteen questions of the on-orbit
astronaut. The students were involved in many activities leading up
to the contact in their Physics, Space, Geography, and English classes.
During one such activity, the students researched a place in the solar
system and created a short television program for the intergalactic
travel show "Postcards."

3. ARISS Annual Report 2009 Posted

The Amateur Radio on the International Space Station (ARISS) Annual
Report 2009 has been posted to the AMSAT Web site. See:
http://www.amsat.org/amsat/ariss/Papers/Annual%20Reports/ARISS_Annual_Report
_2009_Final.pdf

4. ARISS News on Amateur Radio Newsline

The February 26, Amateur Radio Newsline Report 1698 includes one item
about the ARISS program. The "Ham Radio in Space" article summarizes
the ARISSat Design Review meeting held in Orlando, Florida. See:
ftp://ftp.arnewsline.org/quincy/News/news.txt

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

## 20. Radio Meteor Obs. Bull. February

Newsgroup: rec.radio.amateur.space
Date: 2010-03-08 21:12:53 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <c0qap55mc9vknrrm4350i1g1tppo7n1fnd@4ax.com>
Source record: 573
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 199 of February 2010 (87 K) is available now as

http://www.rmob.org/rmobtext/rmob1002.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 21. ANS-073 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-03-14 02:27:03 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001601cac31d$d08908f0$719b1ad0$@net>
Source record: 574
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-073

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
**********

In this edition:

* ARISS to Receive A.I.R Boselli Award
* Thule Greenland Activation on Satellites Beginning March 23
* Viet Nam 3W6C DXpedition Plans Include Satellite Operation
* FUNcube Pictures Released
* RSGB Response to OFCOM WRC-12 Consultation Includes Satellite Bands
* Satellite Shorts From All Over
* GcmWin Software By SM3GSJ Global Grid Square Visualization Tool
* Update on Arecibo EME Activation
* First Reminder for 2010 AMSAT Field Day Competition

SB SAT @ AMSAT $ANS-073.01
ARISS to Receive A.I.R Boselli Award

AMSAT News Service Bulletin 073.01
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.01

This week's ARISS Status Report says the "Associazione Italiana Radio-ascolto" A.I.R. (Italian Radio Listeners Association) has awarded the Boselli prize 2010 to the Amateur Radio on the International Space Station (ARISS) program.

The A.I.R. Board found that ARISS meets every requirement for the award,

which is bestowed on "radio enthusiasts who promote the culture of
radio,
showing the importance of radio communications to hundreds of young students in Italy, Europe and beyond, spreading the use of radio from the forefront of science in the vast outer space down to small classrooms."

The prize will be delivered on May 8 in Faenza during the A.I.R. annual meeting.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-073.02
Thule Greenland Activation on Satellites Beginning March 23

AMSAT News Service Bulletin 073.02
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.02

Reid, N0RC plans to operate on FM satellites from Thule, Greenland (Grid FQ56) for one month starting March 23. Reid describes his plans, "I will try to use satellites that uplink on VHF, because my transmissions on UHF would interfere with the BMEWS radar on base. I'll need to determine if BMEWS interferes with UHF downlink which will affect my satellite operation."

Reid's schedule will be as work/passes/weather permits. He plans to primarily operate the FM satellites due to equipment limitations. He plans some HF operating in between passes. Look for OX3RC on the satellites and on HF starting March 23.

Reid concludes, "I cannot give a specific time of operation because my primary mission is work, and my work schedule is dependent on weather." Since he will not have a set operating schedule Reid will send out an email right before I go on the air for that time period. Reid has setup an email list on Google Groups:
http://groups.google.com/group/ox-thule-2010

[ANS thanks Reid, N0RC for the above information]

/EX

SB SAT @ AMSAT $ANS-073.03
Viet Nam 3W6C DXpedition Plans Include Satellite Operation

AMSAT News Service Bulletin 073.03
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.03

The 3W6C-Team will activate Cï¿½n Cï¿½ Island (AS-185) near Viet Nam on satellites from April 10-18, 2010. The crew use a FT-897 transceiver with homebrewed "Easysat" antenna for 2m and 70cm and a homebrewed 10m cross dipole for AO-7 Mode A.

The team plans to use AO-07*, AO-51*, HO-68*, SO-50, and SO-67. (*first priority on passes when the satellite team is available.) AO-07 will be activated in SBB/CW-mode and ll other satellites will be in FM-mode.

The main areas in the footprint are: East-Asia, Japan, China, India, Australia and east part of Russia. If possible, the 3W6C-Team will use some DX-Windows to near East and west part of Russia.

The main-operator for Satellite will be Hans-Peter, HB9BXE. The satellite station will be operating in manual mode without automatic doppler correction or tracking. On AO-7 expect him to search the his downlink frequency +/- 5KHz to establish contacts. If there is a pileup on the satellites please transmit only your callsign, signal strength and gridsquare.

All DXpedition crew members are primary shortwave operators. So please be patient if they have some difficulty with satellite operation.

For additional information and operating-plan, please see the 3W6C Website: http://www.3w6c.qrv.ch.

[ANS thanks Michael, HB9WDF, Satellite Training Coach for the 3W6C DXpedition, for the above information]

/EX

SB SAT @ AMSAT $ANS-073.04
FUNcube Pictures Released

AMSAT News Service Bulletin 073.04
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.04

AMSAT-UK has released images of the Command, Control & Telemetry (CCT) board being developed for the FUNcube Amateur Radio satellite.

FUNcube is the latest satellite project being developed by AMSAT-UK members. In addition to a telemetry beacon FUNcube will carry a 435 to 145 MHz linear transponder for SSB/CW operation. It will be the first time a satellite this small has carried such a transponder.

The CCT (Command, Control & Telemetry) Board is one of the circuit boards being designed and made by a number of members of the AMSAT-UK FUNcube development team. Its function is to control what the satellite does in realtime:

+ Automatically switch the satellite from 'education mode' to
'amateur mode'.

+ Gather readings from more than 30 sensors on the satellite, eg:
temperatures, battery voltages, currents and encode them in a
Forward Error Correcting format for downlinking via the beacon
transmitter.

+ Collect and store the data from the Material Science Experiment
for a whole orbit to demonstrate variations in thermal performance
of material having different surface finishes in a vacuum and no
gravity.

+ Monitor the main battery voltage, and switch the satellite into a
low power mode if the battery voltage drops below a certain preset
level.

The board will also contain the vital circuitry to deploy the 2 metre
and 70 cms antennas after the satellite is deployed from the rocket.
The board will communicate with the rest of the satellite via the I2C
bus.

The pictures can be seen on the FUNcube site at
http://www.FUNcube.org.uk/

FunCube frequencies for the inverting linear transponder are:
Uplink 435.080 ï¿½ 435.060 MHz
Downlink 145.960 ï¿½ 145.980 MHz
Beacon 145.955 MHz CW and BPSK

AMSAT-UK publishes a colour A4 newsletter, OSCAR News, that is full
of Amateur Satellite information. Information to join AMSAT-UK can be
found on-line at: https://secure.amsat.org.uk/subs_form/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-073.05
RSGB Response to OFCOM WRC-12 Consultation Includes Satellite Bands

AMSAT News Service Bulletin 073.05
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.05

Amateur Satellite Service frequency allocations vary worldwide
depending on your location in the ITU Regions 1, 2, or 3. This
means that some stations may not be able to operate on all of
the satellites; and conversely, if all frequency allocations
are taken into account the design of future satellites becomes
limited.

In preparation for the World Radiocommunication Conference 2012 (WRC-12) the Radio Society of Great Britain (RSGB) has provided the the UK communications regulator OFCOM with a response covering concerns and planning for future satellite frequency allocation between 50 MHz to the microwave bands.

The RSGB response expressed concern about the use of high powered VHF Radar at 142-144MHz immediately adjacent to the weak signal section of the Amateur Primary 144-146MHz allocation. It says that the 53830-5850MHz Amateur Satellite Service downlink allocation should be protected from harmful out of band emissions from High Altitude Platform Stations (HAPS).

Amateur Satellite Service allocations at 50MHz and 3400MHz are identified as medium term objectives in the response of Radio Society of Great Britain (RSGB) to the WRC-12 consultation held by the UK communications regulator OFCOM:

These medium/long term objectives were identified:
+ Amateur allocation at 5 MHz with expanded allocations at 7, 10, 14, 18MHz.

+ A 50MHz Amateur Satellite Service allocation.

+ Allocation of 3400-3410MHz to the Amateur Satellite Service in ITU Region 1.

+ Allocations 10-50MHz wide at low atmospheric attenuation spots between amateur 10, 24 and 47GHz allocations.

+ Amateur and Amateur Satellite Services experimental access or formal allocations above 275GHz.

Read the RSGB WRC-12 response at
http://www.ofcom.org.uk/consult/condocs/wrc_12/responses1/RSGB.pdf

OFCOM World Radiocommunication Conference 2012 (WRC-12) Consultation
http://www.ofcom.org.uk/consult/condocs/wrc_12/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-073.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 073.06
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.06

+ The K4T DXpedition to Dry Tortugas in the Gulf of Mexico wraps up operation on March 15. Satellite operating details have been posted at http://www.amsat.org

+ Listen for Paul, 2E1EUB operating as 2M1EUB from his holiday QTH in northeastern Scotland, about 50 miles west of Aberdeen in the Caringnorms National Park. He will be active on HF and satellites from this QTH starting March 20 for 7 days.

+ Contact Dave, G4DPZ (david.johnson AT blackpepper.co.uk) as soon as possible if you wish to submit a paper or presentation for the AMSAT-UK Colloquium 2010 which will be held at the Holiday Inn, Guildford, UK July 31 - August 1, 2010.

+ Adrian, AA5UK, will be on Oahu (BL11) and Kauai (BL02ic & BL01) from March 24th through April 7th o operating portable KH6. He plans to operate on the Linear and FM satellites during his stay, mostly from his rented house in BL02ic (March 27th through April 5th) and will try to operate portable/mobile from BL11 and BL01 time permitting. Emphasis will be SSB on FO-29, VU-52, AO-7 and HO-68. He will post daily availability via AMSAT BB, QRZ.com: http://www.qrz.com/db/aa5uk, and Twitter: @AA5UK. Sked requests are encouraged due to the limited pass windows for those operators needing HI for WAS at the fringe of the footprints. Please use the email listed on QRZ.com to arrange for a time and date.

+ Mark Hammond, N8MH will be hosting an AMSAT table at the RARSFest in Raleigh, NC on April 3. He would really appreciate some help. It's a nice hamfest, and the RARS club is always very hospitable to an AMSAT table and workers. See: http://rars.org/hamfest/ If you can commit to helping me on April 3, please contact Mark directly off-list via n8mh AT amsat dot org

+ AMSAT Store Manager, Bruce, KK5DO reported the book, "AO-51 Publication Development, Operation and Specifications" by G. Gould Smith, WA4SXM, is once again in stock at the AMSAT online store and ready for immediate shipment. Originally published in 2004, this publication was updated in 2005. It is 73 pages and is in color. Order yours today for only $20.00 plus shipping where applicable. See: http://www.amsat-na.com/store/item.php?id0165

+ In this YouTube video Marlin W3MAT shows the equipment he uses for communicating via the Amateur Radio satellites. The equipment comprises a dual-band hand held FM rig and an Elk dual band antenna. http://tinyurl.com/yzzhhry (SouthGate ARC)

+ Here's a nice video posted by KP4WK using a tape measure antenna to work AO-51. "Satellite Fever KP4WK working AO51 with the tape measure antenna" http://www.youtube.com/watch?v=LBVT-3BwYI8

+ Patrick WD9EWK/VA7EWK posted video clips from his trip to Mexicali last year. One clip was from part of an SO-50 pass, and the other two were during a shallow AO-51 pass:
The SO-50 pass video can be seen at:
http://www.youtube.com/watch?v=qf_pJw9qthM
The two clips from the AO-51 pass are at:
http://www.youtube.com/watch?v=3WskH1spZIc

http://www.youtube.com/watch?v=qseb6JVNgvo
Demonstration from the Yuma hamfest on 20 February 2010
http://www.youtube.com/watch?v=gwyFsk9tFAc
Two videos were from an AO-51 pass I worked as XE2/WD9EWK
from grid DM21jw in northern Baja California:
http://www.youtube.com/watch?v=JW5-hL3SDig
http://www.youtube.com/watch?v=2k2yAMGeALc

+ Bertrand Pinel, F5PL near Castelnaudary, France, used his 3.5m
dish to listen to the signal from Mars Express during the Phobos
Flyby. Details at: http://webservices.esa.int/blog/post/7/1058

+ The next Hudson Valley Satcom Net is Thursday 18 March at 8PM (EDT)
(or 2400 UTC) on the 146.97 MBARC Repeater. The net is also carried
on the N2EYH-L Echolink node. See: http://www.hvsatcom.org
Two area Hamfests in April:
Saturday April 10, the Orange Co. (NY) ARC Hamfest at the Wallkil
Community Center(Near Middletown, NY) See: http://www.ocarc-ny.org
Sunday April 25 Mt. Beacon ARC or "Beaconfeste" at Tymor Pard.
(In the Town of Unionvale, NY) See: http://www.wr2abb.org

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-073.07
GcmWin Software By SM3GSJ Global Grid Square Visualization Tool

AMSAT News Service Bulletin 073.07
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.07

John, K8YSE posted a map this week showing the map of the at least
86 different grids worked by Jim, ND9M during his recent 6 week road
trip. John says the red grids are ones that he worked ND9M in and
blue grids are the ones he missed. See: http://www.papays.com/nd9m.jpg

John wrote, "I've received several inquiries about the software
that was used to create the ND9M/p road trip grid square plot.
The program is a Great Circle Map generator with some very nice
features created by SM3GSJ. KD8CAO originally discovered this program
and posted info about it on the amsat-bb. It is called GcmWin."

Roger, SM3GSJ has added some functionality that makes it very suitable
for those who chase grids. Originally, to plot grid square data, a 6
character grid designation was required. Roger changed it so that 4
character grids were acceptable.

In addition, only one set of grid square data could be overlayed on
the map. He graciously changed the software so that two different
colors from two different grid square files could be plotted. Now

you can show your confirmed grids in one color and your worked grids in another. The program has many other features related to propagation that might interest those who work HF.

The homepage for the software is: http://www.qsl.net/sm3gsj/

John is thinking about creating a webpage that could be used as a repository for posting these maps for anyone that is interested in having their plot on line. Let him know if you're interested. You can view his plot at: http://www.papays.com/k8ysegrids.jpg

In that plot John set the radius at 8200 miles which is a compromise between detail and the maximum distance that can be worked on AO-7. If you decrease the radius, more detail can be shown. You can include grid square numbers if you make the radius small enough. Red is confirmed and Blue is worked.

[ANS thanks John, K8YSE for the above information]

/EX

SB SAT @ AMSAT $ANS-073.08
Update on Arecibo EME Activation

AMSAT News Service Bulletin 073.08
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.08

The planned activation of the Arecibo Dish on Amateur Radio Earth-Moon-Earth (EME) operation was initially mentioned in ANS-045. This article provides additional information to assist stations to prepare for the Echoes of Apollo EME 2010 or World Moon Bounce Day.

Echoes of Apollo EME 2010 or World Moon Bounce Day, is scheduled for the weekend of April 16, 17, and 18. This year, EOA has been graced with a special opportunity to use the Arecibo Dish as the ultimate "big gun" station on 432 MHz SSB & CW. Arecibo has more than 50 dBi gain on 432 MHz so the team thinks it can be heard with modest equipment. A large OSCAR-class antenna array equipped station with low-noise figure preamps may be able to receive the bounced signal.

Ed, KL7UW, wrote an analysis of minimum antenna requirements on the Moon-Net e-mail reflector. Ed said, "My preliminary EME path-link analysis indicates that you will need more than 60 watts at Arecibo for the small home-built antenna/receivers to be successful (especially for SSB). My guess is that a 7-10 element yagi (12-dBi gain) would require use of JT-65 for reception of a 60 watt transmitter at Arecibo. Therefore, obtaining a high power amplifier, 1 KW or greater for Arecibo is very important for successful SSB reception by small stations."

Echoes of Apollo EME event coordinator, Pat Barthelow, AA6EG predicts success by many small stations since he has confirmed the offer and availability of an SSPA producing approximately 600 watts at the output connector of the amplifier for EOA Arecibo use, custom manufactured for this event, and future EME events, by Lionel, F1JRD of Freescale Semiconductor (http://www.freescale.com). Many Many thanks, Lionel! An SSPA 48 volt, 20A power supply has also been donated for use in the event, and future EME events, THANKS to the generosity of Andrea, IK5QLO. Diligent effort on antenna gain, low-noise preamplifiers for 432 MHz, high quality coax, and accurate aiming are necessary for success.

Pat, and others, have posted links to antenna construction sites which are within construction capabilities of many amateur radio operators.

Kent Britian's site with his wonderful homebrew yagi antenna designs using simple materials: http://www.wa5vjb.com/yagi-pdf/cheapyagi.pdf Look at Page 2, for the 432 Yagi.

DK7ZB 70cm-Long Yagis:
http://www.qsl.net/dk7zb/70cm-longyagi/details.htm

G0KSC High Performance Antennas:
http://www.g0ksc.co.uk (scroll down the side panels to 432MHz LFA Yagis)

Wayne Oberbeck, N6NB literally wrote the book, and landmark articles on Quagis: http://commfaculty.fullerton.edu/woverbeck/quagi.htm

An operational transmit test will happen before the end of the month. All operators are encouraged to listen during the test, with the objective of defining a minimum receive system antenna/preamp required for reception of Arecibo SSB Signals. Take careful notes of your station setup and the quality of received signals. Monitor the Echoes of Apollo web page for the latest information:
http://echoesofapollo.com/2010/03/07/world-moon-bounce-2010/

Pat ended with, "Future EME events at Arecibo are being discussed, and are anticipated. NASA has joined discussions to plan to integrate EME as a recognized and appreciated activity useful in NASA training and science outreach activities."

A video tour of Arecibo can be viewed at:
http://www.youtube.com/watch?v=vicxDnn6LEY
http://www.youtube.com/watch?v=7rFeXsVz8hE&NR=1

[ANS thanks Echoes of Apollo EME event coordinator, Pat Barthelow, AA6EG, and EME/Satellite Operator Ed, KL7UW for the above information]

/EX

SB SAT @ AMSAT $ANS-073.09
First Reminder for 2010 AMSAT Field Day Competition

AMSAT News Service Bulletin 073.09
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.09

Field Day is coming again! Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

If you are considering ONLY the FM voice satellites like AMSAT-OSCAR 16, AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points. The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

The format for the message exchange on the ISS or other digital packet satellite is an unproto packet to the other station (3-way exchange required) with all the same information as normally exchanged for ARRL Field Day,
e.g.:
W6NWG de KK5DO 2A STX
KK5DO de W6NWG QSL 5A SDG
W6NWG de KK5DO QSL

If you have worked the satellites on Field Day in recent years, you may have noticed a lot of good contacts can be made on some of the less-populated, low-earth-orbit satellites like Fuji-OSCAR 29 (may or may not be operational), AMSAT-OSCAR 7. During Field Day the transponders come alive like 20 meters on a weekend. The good news is that the transponders on these satellites will support multiple simultaneous contacts. The bad news is that you can't use FM, just low duty-cycle modes like SSB and CW.

2010 AMSAT Field Day Rules are in the process of being posted on the amsat web pages in the near future. Watch for an announcement when the document (.doc and .pdf) is available.

[ANS thanks AMSAT Director Contests and Awards, Bruce KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office. And with that, please consider the note left for a pianist from his wife: Gone Chopin, have Liszt, Bach in a Minuet.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 22. ANS-080 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-03-21 13:19:24 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cac8f9$18a2ba10$49e82e30$@net>
Source record: 575
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-080

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a
worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
**********

In this edition:
* Satellite Operations from Oahu and Kauai Hawii
* AMSAT Hamfest Activities for 27 March 2010
* AO-51 to support Boy Scouts 100th Anniversary
* AMSAT-DL Symposium and AGM
* Call for Papers--2010 ARRL/TAPR Digital Communications Conference
* SpaceX Completes Falcon 9 Static Fire Test
* ARISS Status - 15 March 2010

SB SAT @ AMSAT $ANS-080.01
Satellite Operations from Oahu and Kauai Hawii

AMSAT News Service Bulletin 080.01
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.01

Adrian, AA5UK, will be on Oahu (BL11) and Kauai (BL02ic & BL01) operating
portable KH6. He plans to operate on the Linear and FM satellites during his
stay, mostly from his rented house in BL02ic (March 27th through April 5th)
and
will try to operate portable/mobile from BL11 and BL01 time
permitting. Emphasis
will be SSB on FO-29, VU-52, AO-7 and HO-68. He will post daily
availability via

AMSAT BB, his QRZ page and Twitter: @AA5UK. Schedule requests are encouraged due
to the limited pass windows for those operators needing HI for WAS at the fringe
of the footprints. Please use the email listed on QRZ.com to arrange for a time
and date.

[ANS thanks JoAnne, K9JKM, for the above information]

/EX

SB SAT @ AMSAT $ANS-080.02
AMSAT Hamfest Activities for 27 March 2010

AMSAT News Service Bulletin 080.02
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.02

The Radio Society of Tucson (K7RST) will host the Tucson spring hamfest on
Saturday, 27 March 2010, at the Kino Sports Complex in Tucson, AZ. The Kino
Sports Complex is on Ajo Way, east of the I-10 freeway and Tucson Electric Park
stadium in Tucson. The hamfest will run from 7am-11am (1400-1800 UTC).

Along with an AMSAT table, Patrick Stoddard, WD9EWK, will have on-air
demonstrations using various satellites during the hamfest.

Meanwhile, further East, Keith Pugh, W5IU, will have an AMSAT booth and be
conducting demonstrations at the Parker County Hamfest in Weatherford, TX.

[ANS thanks Patrick, WD9EWK, and Keith, W5IU, for the above information]

/EX

SB SAT @ AMSAT $ANS-080.03
AO-51 to support Boy Scouts 100th Anniversary

AMSAT News Service Bulletin 080.03
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.03

AMSAT-NA is supporting the Boy Scouts of America 100th Anniversary Jamboree by
dedicating an AO-51 V/U FM repeater for the event. From Friday April 16, 15:00
UTC until Sunday April 18 19:00 UTC, an AO-51 repeater will be allocated for
Jamboree use. All users are requested to give way to Jamboree stations or QSO's
with Jamboree stations.

The frequencies used will be 145.880 FM uplink, and 435.150 FM downlink, no PL
tone required.

AMSAT wishes the Scouts good luck operating via the AO-51 satellite for the event.

73, Ed N8BBQ
AO-51 Operations Group

[ANS thanks Ed, N8BBQ, for the above information}

/EX

SB SAT @ AMSAT $ANS-080.04
AMSAT-DL Symposium and AGM

AMSAT News Service Bulletin 080.04
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.04

The AMSAT-DL Symposium and AGM will be held in the radome of the spectacular 20 metre dish at Bochum.

The event takes place on Saturday April 24, 2010 from 10:00 to 17:00 local time.

There will be a lecture programme and an update on AMSAT-DL projects and the results of the joint study between AMSAT-DL and the Federal Republic of Germany Research Center for Aeronautics and Astronautics (DLR).

For further details of the Symposium including directions see
http://tinyurl.com/ykezgjj

AMSAT-DL in Google English
http://tinyurl.com/AMSAT-DL

Federal Republic of Germany Research Center for Aeronautics and Astronautics (DLR)
http://tinyurl.com/GermanyDLR

GO-Mars with AMSAT-DL's P5A Mission - Pixel Page
http://ticket-to-mars.org/index.pl?lang=en_EN

[ANS thanks AMSAT-DL for the above information]

/EX

SB SAT @ AMSAT $ANS-080.05
Call for Papers--2010 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 080.05
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010

To All RADIO AMATEURS
BID: $ANS-080.05

Technical papers are solicited for presentation at the 29th Annual ARRL and TAPR Digital Communications Conference to be held September 24-26, 2010 in Vancouver, Washington [Portland, Oregon]. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2010. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-080.06
SpaceX Completes Falcon 9 Static Fire Test

AMSAT News Service Bulletin 080.06
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.06

On Saturday, March 13, SpaceX successfully completed a test firing of the inaugural Falcon 9 launch vehicle at Space Launch Complex 40 located at Cape Canaveral. Following a nominal terminal countdown, the launch sequencer commanded ignition of all 9 Merlin first stage engines for a period of 3.5 seconds.

Just prior to engine ignition, the pad water deluge system was activated providing acoustic suppression to keep vibration levels within acceptable limits. The test validated the launch pad propellant and pneumatic systems as
well as the ground and flight control software that controls pad and launch vehicle configurations.

This was the final step for the rocket and launch pad before launch itself. SpaceX is now waiting for completion of the final set of tests of the flight termination system, specifically the explosives and initiators, and the acceptance of that test documentation by Air Force range safety.

[ANS thanks SpaceX for the above information]

/EX

SB SAT @ AMSAT $ANS-080.07
ARISS Status - 15 March 2010

AMSAT News Service Bulletin 080.07
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.07

1. Upcoming School Contacts

Shiogama Daini Junior High School in Shiogama, Japan has been scheduled for an
Amateur Radio on the International Space Station (ARISS) contact on Thursday,
March 25 at 07:44 UTC. To prepare for the contact, the youth studied astronomy
and were introduced to the Hubble Space Telescope. They learned about radio
communication and some students continued their studies and prepared for their
amateur radio license exams.

2. JAXA Astronaut Participates in ARISS Contact with Alma Mater

On Tuesday, March 9, JAXA's Soichi Noguchi, KD5TVP participated in an Amateur
Radio on the International Space Station (ARISS) contact with his alma mater,
Ikaruga Elementary School, in Taishi Town, Japan. Approximately 350 guests
watched as fifteen students asked their questions of the on-orbit astronaut.
This ARISS activity was the highlight of the Ikaruga science curriculum on
environmental issues and received significant media coverage.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

## 23. ANS-087 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-03-29 15:07:11 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cacf51$7bb0b7c0$73122740$@net>
Source record: 576
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-087

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
**********

In this edition:
* NASA to Launch Three New CubeSats in November
* Amateur Radio Emergency Regulations Proposal
* Latest AMSAT Awards
* New Agency
* Satellite Shorts
* Document Signed with Energia
* ARISS Status - 22 March 2010

SB SAT @ AMSAT $ANS-087.01
NASA to Launch Three New CubeSats in November

AMSAT News Service Bulletin 087.01
>From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.01

Three small research satellites with amateur radio educational payloads are scheduled for launch in late November.

Called CubeSats because of their shape, they come from Montana State University, the University of Colorado and Kentucky Space as part of NASA's Educational Launch of Nanosatellite mission.

Kentucky's KySat-1 is believed to be the first CubeSat to carry a 2 meter-to-70 cm FM transponder - truly a crossband repeater in space

and one that should be accessible by most radio amateurs within its flight path, authorities said.

CubeSats are in a class of small research spacecraft called pico-satellites. They have a volume of about one quart and weigh no more than 2.2 pounds. The University of Florida was selected as an alternate in case one of the three primary spacecraft cannot fly.

[ANS thanks Jack, KD1PE, for the above information]

/EX

SB SAT @ AMSAT $ANS-087.02
Amateur Radio Emergency Regulations Proposal

AMSAT News Service Bulletin 087.02
>From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.02

FCC propose amendment to Amateur Radio emergency drill regulations
There has been much debate in the US recently on the issue of amateur radio operators participating in emergency drills which have been organised the their employers. The FCC is hoping to clarify the rules and allow more flexibility with this amendment.

A Proposed Rulemaking was released yesterday containing amendments to Section 97:113 of the Amateur Radio Service Rules regarding using paid employees in government sponsored emergency training drills.

For actual filing see:
WWW.regulations.gov

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-087.03
Latest AMSAT Awards

AMSAT News Service Bulletin 087.03
>From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.03

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

Jonathan Guthrie, KA8KPN
Mesa Community College ARC, KM7CC
David Sharpe, KF7DRQ
Jim Adams, K0BAM
Richard Rowe, KJ4OUQ

The following have earned the AMSAT Communications Achievement
Award.

Randal Schulze, KD0HKD, #509
Michael Vargo, AC8CX, #510
Jose Toste, CU3EQ, #511

The following have earned the W4AMI Achievement Award
(for 1000 contacts)

Douglas Anoman, KC9MLN, #60
Howard Merritt, KD7ZLF, #61
Chip Weems, W4PBG, #62

The following have earned the South Africa AMSAT Communications
Achievement Award

Randal Schulze, KD0HKD, #US142
Michael Vargo, AC8CX, #US143
Jose Toste, CU3EQ, #US144

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information}

/EX

SB SAT @ AMSAT $ANS-087.04
New Agency

AMSAT News Service Bulletin 087.04
From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.04

At a Conference in London held today, it was announced that April 1st
2010 is to be the "launch" date for the establishment of the United
Kingdom Space Agency. This will take over responsibility for space
from the previous voluntary partnerships of Government Departments
and research councils, the British National Space Centre.

It is reported that the new agency will bring these together "under
oneroof". It will also include the Technology Strategy Board and the
Met Office.

In addition to this announcement, the UK Government has stated that
£24m will be invested into The International Space Innovation Centre
(ISIC) at Harwell which is also the site of the new ESA technical
facility.

Lets hope the new Agency looks kindly towards UK cubesat projects
like AMSAT-UK's FUNcube! (New possibilities?)

For more details see http://news.bbc.co.uk/1/hi/sci/tech/8579270.stm

Graham G3VZV

[ANS thanks Graham, G3VZV, for the above information]

/EX

SB SAT @ AMSAT $ANS-087.05
Satellite Shorts

AMSAT News Service Bulletin 087.05
From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.05

AMSAT at Dayton Reminders

Another reminder that AMSAT has available a block of rooms for Dayton.
The hotel is the Country Inn & Suites in Fairborn. The cost is $99 a
night. If you are interested, please call me at 301-589-6062 to make
a reservation. The block will be gone on April 13th! Don't forget
the AMSAT-TAPR dinner on Friday night. You can register for that
online at the AMSAT website.

[ANS thanks Martha for the above information]

---

Listen to 2 Meter Houston AMSAT Net via the Internet

The Houston AMSAT Net now has a new Icecast streaming server, thanks
to Mike, N0VZC. During our net, Tuesday 8PM Central Time (Wednesday
0100 UTC), our audio can be heard by pasting the following into
your URL, Winamp, iPhone, iTunes or almost any other player.

radio.arert.net:8000/amsat.m3u

We hope that you continue enjoying the Houston AMSAT Net. You can
also listen on Echolink in the *AMSAT* conference as well as after
the net completes as a Podcast from the iTunes store or your favor-
ite Podcast player.

[ANS thanks Bruce KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-087.06
Document Signed for ARISSat Delivery

AMSAT News Service Bulletin 087.06
From AMSAT HQ SILVER SPRING, MD.
March 28, 2010

To All RADIO AMATEURS
BID: $ANS-087.06

Protocol Document Signed for ARISSat delivery
This week a protocol document was signed between AMSAT, NASA and Energia stating that AMSAT would deliver two satellites to Energia by 1 July 2010. Since we only have one set of solar panels, the second unit will be tested and operational except for the solar panels. The project is on schedule for the July delivery and we look forward to having ARISSat in space later this year.

Gould, WA4SXM
ARISSat Project Manager for AMSAT

[ANS Thankd Gould, WA4SXM, for this information]
/EX

SB SAT @ AMSAT $ANS-087.07
ARISS Status - 15 March 2010

AMSAT News Service Bulletin 087.07
From AMSAT HQ SILVER SPRING, MD.
March 22, 2010
To All RADIO AMATEURS
BID: $ANS-087.07

Amateur Radio on the International Space Station (ARISS) Status Report
March 22, 2010

1. Upcoming School Contacts

Shiogama Daini Junior High School in Shiogama, Japan was scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, March 25 at 07:44 UTC. To prepare for the contact, students studied astronomy and were introduced to the Hubble Space Telescope. They also learned about radio communications and some continued their studies and prepared for their amateur radio license exams.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Walnut Creek Elementary School in Azle, Texas on Monday, March 29 at 15:08 UTC. Each student researched and created a modelof a selected space object and then presented his work to the class. Retired Lockheed employees and members of local radio clubs gave demonstrations of satellite communications to the youth. The school recently formed an amateur radio club and students have enjoyed learning what radios can do.

2. Greece Students Question Astronaut via ARISS Contact

On Tuesday, March 16, Timothy Creamer, KC5WKI connected with students attending 18 Dimotiko Scholeio Peristeriou in Athens, Greece via an Amateur Radio on the International Space Station (ARISS) contact. Students posed 19 questions to the on-orbit astronaut during the ISS overhead pass as an audience of 700 students, teachers and

community members gathered to watch the event. Several dignitaries were present, including the General Secretary for Communications of the Ministry of Transportation and Telecommunication of Greece, the Mayor of Peristeri (Athens) and the four vice mayors of Peristeri City. The contact was integrated into the school's science curriculum covering subjects on astronomy and radio communications.

3. Astronaut Training Status

On Monday, March 15, astronaut Paolo Nespoli, IZ0JPA participated in an Amateur Radio on the International Space Station (ARISS) simulated contact with students from Quintino Sella, Biella, Italy with audio available on IRLP (Internet Radio Linking Project). This training session was a terrestrial-based amateur radio contact using ARISS equivalent equipment. Nespoli is slated to fly with Expedition 26 in November 2010.

4. ARISS International Team Meeting Held

The Amateur Radio on the International Space Station (ARISS) international team met for the monthly teleconference on March 16. Status reports were given on the Columbus module radio equipment as well as ARISSat-1. Minutes have been posted.
See: https://www.rac.ca/ariss/arisstel2010-03-16.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 24. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-04-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1270101601@panix.com>
Source record: 577
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 25. WSR-091 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-04-03 12:07:33 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001001cad326$38977b30$a9c67190$@net>
Source record: 578
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-091.S1
WSR 091 Part 1 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S1
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning
```

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19

[040152010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11

Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-091.S2
WSR 091 Part 2 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S2
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL

=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04012010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/

[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====

LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-091.S3
WSR 091 Part 3 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S3
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-091.S4
WSR 091 Part 4 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S4
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 26. ANS-094 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-04-04 01:08:34 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001601cad393$55d29dc0$0177d940$@net>
Source record: 579
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-094

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
**********

In this edition:

* AMSAT at Dayton Hamvention 2010
* 2010 AMSAT Space Symposium & Annual General Meeting
* FUNcube at United Kingdom Space Conference 2010
* Delfi-C3 Survives Orbital Near Miss
* Satellite Shorts From All Over
* Update on the ISS Columbus Module Amateur Radio Station

SB SAT @ AMSAT $ANS-094.01
AMSAT at Dayton Hamvention 2010

AMSAT News Service Bulletin 094.01
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.01

The 2010 Dayton Hamvention will be held this year on 14-16 May 2010.

This is the 59th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2010, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT Activities at Dayton
---
AMSAT has planned a number of great activities during Hamvention. There will also be a number of new offerings at the AMSAT booth as well as special deals.

The AMSAT theme for 2010 is "Space Technology for Hams". We will have multipe exhibits of the new AMSAT satellites on display.

ARISSat
---
ARISSat has continued to develop this past year. We will have on display one of the operational development prototypes. We expect the satellite to be launched later this year.

AMSAT Thursday Night Get-together
---
We will be at Tickets Pub & Eatery this year. The menu is great and a nice change of pace. Check it out at TicketsPub.com

AMSAT Forum
---
The AMSAT Forum will be on Saturday May 15 in Forum Room 5 from 11:15 am - 1:30 pm.

AMSAT/TAPR Banquet
---
The fourth annual AMSAT/TAPR Banquet will be Friday night May 14 at the Kohler Banquet Center. TAPR will be providing the keynote speaker. The price for the Banquet is $30. Seating is limited and reservations are required. Follow the Dayton Banquet 2010 link below for information about reservations and additional information. Additional information as it becomes available.

AMSAT Hotel
---
AMSAT has a limited block of rooms reserved at the Country Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT office for room price and availability during Hamvention. Priority for rooms will be given to those volunteering to work in the AMSAT booth for multiple 2 hour shifts during Hamvention. The phone number for the AMSAT office is 301-589-6062. Other hotels in the immediate area of the Country Inn & Suites include the Fairfield Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn and the Homewood Suites if additional accommodations are needed.

[ANS thanks the AMSAT Dayton Hamvention Team for the above information]

/EX

SB SAT @ AMSAT $ANS-094.02
2010 AMSAT Space Symposium & Annual General Meeting

AMSAT News Service Bulletin 094.02
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.02

AMSAT announced the 2010 AMSAT Space Symposium will be held in Chicago on Friday, October 8th through Sunday, October 10th.

Features planned for this exciting weekend of Amateur Radio in Space:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet Keynote Speaker and Door Prizes

This year we have selected the Chicago/Elk Grove Holiday Inn just west of Chicago at 1000 Busse Road, Elk Grove, IL. The hotel is near O Hare

Airport and has free hourly shuttles.

Watch the ANS bulletins and the AMSAT Symposiumweb page for the latest updates: http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-094.03
FUNcube at United Kingdom Space Conference 2010

AMSAT News Service Bulletin 094.03
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.03

The United Kingdom Space Conference was held from March 24-28 in Godalming Surrey. This premier event always attracts a stellar cast of speakers and this year was no exception. The launch of the UK Space Agency in same week added to the excitement. Many of the presentations are available for view from the Ustream server

AMSAT-UK attended to explain their exciting plans for the FUNcube satellite. As well as the Amateur Radio SSB/CW transponder FUNcube will provide an in-orbit tool for science education outreach and hands-on training in space and all the STEM subjects (Science technology Engineering & Mathematics)The telemetry system is designed for easy reception by school pupils using extremely simple hand held VHF receive equipment connected to a PC sound-

card or USB port.

The satellite contains a materials science experiment and pupils will be able to receive the results direct from space and compare them with similar reference experiments in the classroom.

The FUNcube stand at the conference included a mock-up of the new satellite and a demonstration of the telemetry. FUNcube is expected to be launched in early 2011

Michael Castle, G1ZVN, gave a short introduction on FUNcube during one of the education sessions and FUNcube was also featured in a presentation on the UK National Cubesat project.

During the 5 days over 1000 people attended the event and the concept behind FUNcube was well received.

There will be more demonstrations of FUNcube at the AMSAT-UK International Space Colloquium to be held in Guildford from 31 July to 1 August.

For more information about AMSAT-UK follow these links:
FUNcube: http://www.FUNcube.org.uk/
AMSAT-UK: http://www.uk.amsat.org/
Ustream Server: http://www.ustream.tv/channel/uksc-2010

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-094.04
Delfi-C3 Survives Orbital Near Miss

AMSAT News Service Bulletin 094.04
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.04

This week the Delft University of Technology in the Netherland's Delfi-C3 satellite survived a close encounter with orbiting COSMOS debris. On March 30 the two spacecraft passed near each other with a head-on velocity of 15 km/sec and an estimated clearance of 492 meters. As of April 2, Wouter was able to report, "Delfi-C3 and the COSMOS debris missed each other by more than 700 meters, so no harm was done as far as we know. Delfi-C3 is still performing nominally."

The Delfi-C3 Operations Team invites amateur radio operators to have a look at the mission operations page at:
http://www.delfic3.nl/index.php?option=com_content&task=view&id=&Itemid=2
for frequency info and the latest RASCAL download.

Due to Delfi-C3's habit of sometimes switching off from science mode, you might hear nothing while Delfi-C3 is fine. Don't panic! but please do listen the orbits after and post your findings on the satellite status page at: http://oscar.dcarr.org

[ANS thanks Wouter Weggelaar, PA3WEG for the above information]

/EX

SB SAT @ AMSAT $ANS-094.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 094.05
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.05

+ Nick, KB1RVT reported working OX/N0RC, Reid on HO-68 from Greenland (grid FQ56) at 1544 UTC on April 1. Ib, OZ1MY reported he could copy Reid in Copenhagen during the same pass. Reid will be using OX/N0RC for his call since OX3RC never came in. Reid added that his trip to Greenland has been extended until the end of May.

+ If you want to read a straight-forward guide to Software Defined Radio check out the web pages produced by Tobias Wellnitz DH1TW: http://www.dh1tw.de/understanding-the-sdr-concept

+ Gabriel, EA6VQ reported DX-Sherlock now provides satellite-specific real-time maps and QSO lists. See: http://www.vhfdx.info/spots/map.php?Frec&#65533;T

+ OSCAR-11 achieved 26 years in orbit on 01 March! It was designed, built and launched within a period of six months, using commercially available 'off the shelf' components (COTS). Once again, congratulations to Professor Sir Martin Sweeting G3YJO, his team at the University of Surrey and groups of radio amateurs who also contributed to the project. Unfortunately, the satellite wasn't transmitting on its birthday, but was heard briefly, three days later. Due to eclipses, deterioration of the battery and other parts of the satellite, it's not possible to predict when the satellite will be heard in the coming

months. It is likely that it may be heard occasionally, by stations tuning around the beacon frequency: 145.826 MHz. AFSK FM ASCII Telemetry. Please send reception reports to g3cwv at amsat dot org.

+ JI5RPT plans to operate as JD1BLY from Chichijima Island (IOTA AS-031) Ogasawara on 40m to 6m and Satellite (CW/DIGI/SSB) between May 2 to May 7, 2010. QSL via his home callsign JI5RPT. Logsearch will be on his website. http://www.ji5rpt.com/jd1/ (via Makoto, JI5RPT

via NG3K-DX-News and MakeMoreMilesonVHF Newsletter).

+ Eric, ON4HF has set up a new satellite forum and invites interested radio amateurs to register and enjoy the site at:

http://www.on4hf.be/forum

+ Listen for Brock, W6GMT on the FM satellites as he begins his annual trip north to the summer QTH in Minnesota on Wednesday, April 7th. His trip will take him through Oklahoma, Kansas, Nebraska, Iowa, and Minnesota. I will activate grids using his FT-817 and an Elk antenna. He will accept grid requests via e-mail at w6gmt@bak.rr.com. QSL to his Minnesota address.

+ And, LU4FLJ worked Sebasti&#65533;n, W4AS via AO-7, Mode B on 3/21/2010 at 23:22 UTC.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-094.06
Update on the ISS Columbus Module Amateur Radio Station

AMSAT News Service Bulletin 094.06
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.06

The Amateur Radio on the International Space Station (ARISS) international team met for the monthly teleconference on March 16. Two highlights of the meeting include the planned installation of VHF and UHF FM amateur radio equipment and possible digital amateur television from the Columbus module at the International Space Station.

The installation of the Ericsson radio used by ARISS in the Columbus module is scheduled to be done by astronaut Mike Fincke, KE5AIT on the STS-134 shuttle flight planned for late July 2010. ESA hopes to have a special contact to commemorate the first operation of amateur radio in the Columbus Module.

Gaston Bertels, ON4WF reported that the Amateur Radio - Columbus (ARCOL) Working Group is currently proposing the flight of a digital amateur television (DATV) system to downlink TV on S-band. ARISS US team members Mark Severance N5XWF; Mark Steiner K3MS; Lou McFadin W5DID; Kenneth Ransom N5VHO; Rosalie White K1STO; and Carol Jackson KB3LKI are assisting.

The Digital Television capability, under consideration for installation by the ESA in December, 2010 poses technical challenges. The biggest technical challenge is the obtaining of a suitable power supply. Gaston is working with ESA to resolve this.

While DATV from the Columbus module will open up an exciting new capa-bility for education contacts, it will require a more capable ground station to receive the S-band DATV signals. This has implications for the existing telebridge stations, including how the DATV images would

be routed to the event sites. Gaston will be establishing a working group to help tackle these two challenges (reception and passing to the event site), and is actively soliciting volunteers to help out.

The ARCOL group has already accomplished the assembly and installation of
the L- and S-band patch antennas mounted on the exterior of the Columbus

Module.

[ANS thanks the ARISS team for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the tale of the man who walks into a hardware store and asks if they have a tool for breaking up some hard ground. The shop assistant points to a row of suitable tools along the wall and replies, "Certainly sir, take your pick." After that the bloke tried a career as a gold prospector, but it didn't pan out.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 27. Radio Meteor Obs. Bull. March 2010

Newsgroup: rec.radio.amateur.space
Date: 2010-04-07 20:32:43 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <9tqpr5plad3hjcagmn40r66445opa3hfar@4ax.com>
Source record: 580
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 200 of March 2010 (95 K) is available now as

http://www.rmob.org/rmobtext/rmob1003.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 28. ANS-101 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-04-14 18:22:35 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cadbff$70909f30$51b1dd90$@net>
Source record: 581
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-101

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
**********

In this edition:
* AO-51 New PL Operation Being Tested
* Deadline Approaching To Reserve Rooms in AMSAT Block At Dayton
* USSTRATCOM Approves Continued AMSAT TLE Distribution
* Ten Hams in Orbit Now
* Estonian University Plans Amateur Radio CubeSat
* Arecibo on 432 MHz Moon Bounce
* ARISS Status - 5 April 2010

SB SAT @ AMSAT $ANS-101.01
AO-51 New PL Operation Being Tested

AMSAT News Service Bulletin 101.01
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.01

Drew Glasbrenner, KO4MA, reports that AO-51's 435.150 transmitter has been turned off and the 435.300 transmitter raised to near 2 watts output. On Saturday, 10 April, the new PL routine was turned on. This improved routine will turn the downlink on with an unsquelched uplink when it hears a 67 hz tone. The plan is to leave a tail of several minutes, so the transmitter will stay on without hearing a tone for an interval of several minutes.

What does this mean for the user? It would be helpful to program in a 67 hz PL tone again, but not absolutely required as long as someone else in the footprint does. It also means if you are the first person in the footprint (not very likely in North America, Europe, or Japan) you might not hear the satellite until after it hears 67hz for a few seconds.

Reports from when the downlink turns on or off would be appreciated.

73, Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-101.02
Deadline Approaching To Reserve Rooms in AMSAT Block At Dayton

AMSAT News Service Bulletin 101.02
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.02

Again a friendly reminder that the cutoff date for the AMSAT block of rooms in Dayton is April 20th. If you are planning to stay with us, please call me at 301-589-6062 to make your reservation. I will need a credit card number to hold the room.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-101.03
USSTRATCOM Approves Continued AMSAT TLE Distribution

AMSAT News Service Bulletin 101.03
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.03

AMSAT-NA Orbital Data Manager Ray Hoad, WA5QGD said this week, "I am pleased to announce that AMSAT NA has received approval to continue re-distribution of Keplerian elements from the USSTRATCOM data source (Space Track website) for the period April 1, 2010 to April 1, 2011. Thanks to the USSTRATCOM team and especially to Mr. Mark Riddle for their help in this process."

This means that the AMSAT Keplerian Elements in verbose format and the 2-line format can be freely distributed by those who recieve them from AMSAT. AMSAT's two formats are each considered an AMSAT product and therefore can be freely distributed. AMSAT asks that AMSAT-NA be

given credit as the source for your redistribution.

[ANS thanks Ray Hoad, WA5QGD for the above information]

/EX

SB SAT @ AMSAT $ANS-101.04
Ten Hams in Orbit Now

AMSAT News Service Bulletin 101.04
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.04

Six of the seven astronauts on the shuttle Discovery are licensed radio amateurs and will join four radio hams already on the International Space Station (ISS).

The shuttle Discovery (STS131) crew consists of:
Dorothy Metcalf-Lindenburger, KE5DAT
Stephanie Wilson, KD5DZE
Naoko Yamazaki, KE5DAS
James P. Dutton, Jr., KE5HOE,
Rick Mastracchio, KC5ZTE,
Clayton Anderson, KD5PLA
Alan Poindexter

Already onboard the ISS are radio hams:
Tracy Caldwell Dyson, KF5DBF
Timothy J. Creamer, KC5WKI
Soichi Noguchi, KD5TVP
Mikhail Kornienko, RN3BF
along with Oleg Kotov and Alexander Skvortsov.

[ANS thanks SouthGate ARC and ISS Fan Club for the above information]

/EX

SB SAT @ AMSAT $ANS-101.05
Estonian University Plans Amateur Radio CubeSat

AMSAT News Service Bulletin 101.05
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.05

IARU Amateur Satellite Frequency Coordination reports the University of Tartu, Estonia, has submitted a frequency coordination application to the IARU for an Amateur Radio CubeSat called ESTCube-1.

The proposal is for a 1U CubeSat in Low Earth Orbit (LEO) with UHF downlinks and a VHF telecommand uplink. It is hoped to launch in 2012

although no launch opportunity has yet been confirmed.

ESTCube-1 will carry a camera to acquire images of Estonia for out reach purposes and will deploy a 10 meter conductive Hoytether as a part of the development work of an electric solar wind sail.

ESTCube
http://tinyurl.com/yk66s2o

[ANS thanks IARU for the above information]

/EX

SB SAT @ AMSAT $ANS-101.06
Arecibo on 432 MHz Moon Bounce

AMSAT News Service Bulletin 101.06
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.06

The Arecibo Observatory Amateur Radio Club will be putting the 1000-foot radio telescope on the air for 432 MHz EME from April 16-18.

It can be heard with a small hand-held yagi pointed at the moon

The scheduled times of operation are:

April 16: 1645 - 1930 UTC

April 17: 1740 - 2020 UTC

April 18: 1840 - 2125 UTC

Callsign: KP4AO

Tx Frequency: 432.045 MHz

Rx Frequency: 432.050 to 432.060+

Tx power: 400 W

Antenna gain: 60 dBi

System noise temp: 120 K (cold sky)

System noise temp: 330 K (when pointed at moon)

KP4AO can be heard with a small hand-held yagi pointed at the moon and a good receiver. A 15 dBi antenna and 100 W will be enough to work us on CW.

Operators at KP4AO will do their best to work as many stations as possible. Each session will start with a brief announcement and CQ in SSB. SSB QSOs may continue for 30 minutes to an hour, if the QSO rate

remains high.

The mode will be shifted to CW as soon as it is judged that higher QSO rates would result.

We will listen for calls at frequencies 5-15 kHz higher than our own, and even higher if QRM warrants. Callers who s-p-r-e-a-d o-u-t are more likely to be copied.

If you've already worked us in any mode, please do not call again -- give others a chance.

If we call "CQ QRP", we will listen for stations running 100 W or less to a single yagi. Please do not answer such a CQ if you are running more power or have a larger antenna.

On April 18, if we reach a condition where most calling stations have been worked, and we judge that operating in the digital mode JT65B would produce a higher QSO rate, we will switch to JT65B.

Note that any of these planned operating strategies may be changed as circumstances dictate.

We are extremely fortunate to have been granted access to the world's largest radio telescope for this amateur radio good-will event. We look forward to working as many stations as possible in the alloted time!

[ANS thanks John, KB1MGI, for the above information]

/EX

SB SAT @ AMSAT $ANS-101.07
ARISS Status - 5 April 2010

AMSAT News Service Bulletin 101.07
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.07

1. Astronaut Soichi Noguchi Chats with Texas Students via ARISS Contact

On Monday, March 29, Walnut Creek Elementary School students in Azle, Texas took part in an Amateur Radio on the International Space Station (ARISS) contact with JAXA astronaut Soichi Noguchi, KD5TVP. All 23 questions were answered with time for a two way "Goodbye." ARISS was integrated into the science curriculum as students researched space objects and gave presentations to their class. The youth also attended satellite communications demonstrations given by retired Lockheed employees and members of local radio clubs. On the day of the contact, a proclamation was read by an Azle City representative declaring it to be Space Day in Azle. Four television stations and one local newspaper covered the event and the audio was available on EchoLink.

2. HAMEX 2010 ARISS Exhibit

HAMEX 2010, the largest RadioFest in Canada, was held on Saturday, March 27 in Toronto. AMSAT (Radio Amateur Satellite Corporation) and ARISS (Amateur Radio on the International Space Station) members attended the event and manned an exhibition booth which displayed two mini satellite communications stations as well as information boards with pictures of astronauts involved in the ARISS program. A large AMSAT banner was post-ed, along with two 7 foot posters on loan from the Canada Space Agency (CSA). CSA also provided handouts, stickers and various magnetic logos, which along with pamphlets describing AMSAT and the ARISS program, were distributed to the many visitors the exhibit attracted. The event was a success in generating interest in the ARISS program and the team was invited back next year.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

## 29. ANS-108 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-04-18 14:20:51 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000a01cadf02$56090200$021b0600$@net>
Source record: 582
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-108

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
**********

In this edition:
* AMSAT BOD Nominations Due
* AO-51 67Hz Access Tone Experiment in Progress
* Deadline Extension To Reserve Rooms in AMSAT Block At Dayton
* Matching Funds Opportunity
* SO-67 Operation Expected to Resume Soon
* Dayton Happenings
* Satellite Shorts From All Over
* ARISS Status - 12 April 2010

SB SAT @ AMSAT $ANS-108.01
AMSAT BOD Nominations Due

AMSAT News Service Bulletin 108.01
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.01

It is time to submit nominations for the upcoming open seats on the AMSAT--NA Board of Directors. A nomination requires either one Member Society or five current individual members to nominate an AMSAT member for the position. Three director's terms expire this year:
Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith, WA4SXM.
Nominations must be in writing and mailed to:
AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910.
They can arrive no later than June 15th.

[ANS Thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-108.02
AO-51 67Hz Access Tone Experiment in Progress

AMSAT News Service Bulletin 108.02
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.02

The AO-51 Control Team has enabled the new PL routine. This improved routine will turn the downlink on with an unsquelched uplink when it hears a 67 Hz tone. At present there is a tail of several minutes so the transmitter will stay on without hearing the tone.

AO-51 users are urged to program in a 67 Hz PL tone again, but this is not absolutely required as long as someone else in the footprint has already enabled the satellite with the tone. It also means if you are the first person in the footprint (not very likely in North America, Europe, or Japan) you might not hear the satellite until after it hears 67 Hz for a few seconds.

Mark, N8MH commented on the new operating mode, "The transmitter shuts off (for about a second, maybe less) after 2 minutes, even if people are talking with a 67Hz tone. So, a new 120 second period will not start

until the current one ends."

Andre, ZS2BK observed, "On a south to north pass into ZS, the bird was off and was switched on with the tone. It stayed on for 120 seconds. It goes off momentarily as a tone equipped station is transmitting."

The latest AO-51 Control Team news can be viewed on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the AO-51 Control Team for the above information]

/EX

SB SAT @ AMSAT $ANS-108.03
Deadline Extension To Reserve Rooms in AMSAT Block At Dayton

AMSAT News Service Bulletin 108.03
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.03

Again, a friendly reminder that the cutoff date for the
AMSAT block of rooms in Dayton has been extended until
April 20th. If you are planning to stay with us,
please call me at 301-589-6062 to make your reservation.
I will need a credit card number to hold the room.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-108.04
Matching Funds Opportunity

AMSAT News Service Bulletin 108.04
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.04

Matching Funds Opportunity

The Dayton Amateur Radio Association (DARA) will match one-for-one
any donations made to AMSAT between now and June 30, 2010 up to a
maximum of $5,000. You can make your donation count even more.
Now is the time to accept the DARA challenge. Please support
"Getting AMSAT Back into Space" and help us raise the funds
needed for our next satellite project.

AMSAT's Project "Fox" is a cubesat that will provide a 2 meter-70
Centimeter FM transponder that will match the ground performance of
AO-51. You can send your donation to: AMSAT, 850 Sligo Ave #600,
Silver Spring MD 20910. If you prefer, you can call Martha at the
AMSAT office (US call toll free at 888-322-6728 or 301-589-6062)
and contribute with a credit card.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-108.05
SO-67 Operation Expected to Resume Soon

AMSAT News Service Bulletin 108.05
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.05

The SA AMSAT web page at http://www.amsatsa.org.za/ says, "Amateur
Radio operation is expected to return soon. Keep an eye on the SA-
AMSAT web page. All requests for SO67 operation will be handled by
SA AMSAT and schedules will be published on http://www.amsatsa.org.za.
Details on how to apply for operation in your area will be announced
soon."

This month saw the transfer of the control of the satellite from Sun-
space to the CSIR's Satellite Application Centre at Hartebeeshoek.
Sunspace will continue working on the commission of some of the ex-
perimental payload which include the NMMU string experiment, the DOC
communication experiment and the VLF experiment from UKZN.

Although a hugely successful mission thus far, the past six months have been challenging for Engineers at Sunspace and unfortunately not without incident.

"We suffered a permanent loss of the Z-axis reaction wheel early on during commissioning" Jan-Albert Koekemoer commissioning engineer at Sunspace said. We adapted the Attitude Determination and Control System (ADCS) algorithms so as to still allow for controlled imaging with the remaining two wheels - Yaw-control was then slightly impeded and the off-Nadir Roll angle limited to ±20°."

"Due to a power system anomaly, we have also lost access to one of the two CCD control boards. Each control board interfaces to one three-colour CCD. The board we lost contains the Green, Xantrophyl and Blue spectral bands. The remaining board contains the Red, Red-Edge and Near-Infrared bands."

"We recently also lost the Y-axis reaction wheel (most likely also due to a power distribution failure), this meant the loss of three-axis control, but amazingly we can still take high-resolution images as before." An image captured by SUMBANDILASAT can be seen at: http://www.amsatsa.org.za/

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-108.06
Dayton Happenings

AMSAT News Service Bulletin 108.06
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.06

AMSAT/TAPR Banquet
Dr. Bob McGwier will be the speaker at the 2010 AMSAT/TAPR Banquet. Bob has been a very active volunteer in both organizations for many years and always delivers an enteraining and informative presentation. Reserved tickets may be ordered via the AMSAT Web site store or by calling Martha at the AMSAT office (301) 589-6062.

AMSAT Forum at Dayton
The 2010 AMSAT Forum at the Dayton Hamvention will be on:

Saturday, May 15 from 11:15 am to 1:30 pm in Forum Room 5

Alan Biddle, WA4SCA will moderate the Forum

Speakers

Barry Baines, WD4ASW, AMSAT President, "AMSAT Status Report"
What is happening within AMSAT? AMSAT President Barry Baines will highlight current activities within AMSAT and discuss some of the

challenges facing the organization.

Drew Glasbrenner, KO4MA, AMSAT VP Operations,"AMSAT Satellite Operations

and International Satellite Operations". Drew, AMSAT VP of Operations,
will discuss operational AMSAT satellites as well as update us on new
and future International Satellites.

Mike Forsythe, AC2V, "Integrating Satellite Operations into DXpeditions"
Mike, K4T Team Leader will present the K4T DXpedition and how to have
satellite operations as a major part of DXpeditions, involving youth
and making it all work on green power!

Gould Smith, WA4SXM,AMSAT VP User Services, "Getting ARISSat-1
Ready to Fly". Gould is the AMSAT Project Manager for ARISSat-1 and will

talk about the current status of the satellite project, testing and the
delivery of two satellites to Russia in July.

Alex Harvilchuck, N3NP, "NextGen CubeSat Program Update".
Alex, a Systems Engineer with IBM, is the NextGen CubeSat Program
Manager and will be providing an update on the Program.
A team of Binghamton University engineering students have been
modifying the power systems from ARISSat-1 for use in a 3U CubeSat,
with a U/V linear transponder, for AMSAT.

[ANS Thanks, Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-108.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 108.07
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.07

Satellite Shorts From All Over

+ K4T DXpedition video of the recent DXpedition to Dry Tortugas was
unique in being entirely wind powered and having two amateur radio
satellite stations. They have posted a video at:
http://www.youtube.com/watch?v=oDk36CaWA

+ Gavin, M1BXF reports the Camb-hams, the social side of the Cambridge
Repeater Group (ex Pye telecoms group) will be active on FM and SSB
satellites as GS3PYE/P from grid IO67nt on the Island of Harris,
Scotland between May 1st and May 15th. More information can found on
their DXpedition webpage:
http://dx.camb-hams.com/dx-peditions/harris-dxpedition-10/

+ The 2010 CubeSat Developers' Workshop takes place this week at Cal Poly in San Luis Obispo between April 21-23. A link to the webcast of workshop forums has been posted at: http://www.cubesat.org/index.php/workshops/upcoming-workshops

+ The Mexican Federal Telecommunications Commission ("CoFeTel"), Mexico's "FCC", announced today that hams in Mexico have been authorized the use of the 4B prefix for 2010, to commemorate both the 200th anniversary of Mexican independence and the 100th anniversary of the Mexican Revolution. With this in mind, maybe we will hear some of our Mexican friends using this prefix on the satellites throughout the rest of 2010.

+ The Houston AMSAT Net simulcasts via an Icecast streaming server at this link: radio.arert.net:8000/amsat.m3u This net meets on Tuesday 8PM Central Time (Wednesday 0100 UTC). The audio is also available on Echolink in the *AMSAT* conference.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-108.09
ARISS Status - 12 April 2010

AMSAT News Service Bulletin 108.09
From AMSAT HQ SILVER SPRING, MD.
April 12, 2010
To All RADIO AMATEURS
BID: $ANS-108.09

Amateur Radio on the International Space Station (ARISS) Status Report
April 12, 2010

1. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Jessup Elementary School in Houston, Texas on Monday, April 19 at 18:43 UTC. This will be a telebridge connection through ground station WH6PN in Hawaii. The school has incorporated the ARISS activity into its curriculum, specifically focusing on science, math, and language arts instruction across the pre-kinder-garten to fourth grade levels.

2. Astronaut Timothy Creamer Speaks with Italian Students via ARISS

On Tuesday, April 6, on-orbit astronaut Timothy Creamer, KC5WKI participated in an Amateur Radio on the International Space Station (ARISS) contact with students from Scuola Primaria De Gasperi in Bari, Italy. The contact was held at the Cittadella Mediterranea della Scienza,
which was designed to stimulate interest of the general public and espec-
ially youth, in fields of science and technology. To prepare for the contact, students studied principles of radio communications and space

missions and were given a presentation on ARISS by ARISS mentor Francesco
De Paolis, IK0WGF. The event drew an audience of more than 100 students,

teachers and guests as well as members of the media. The contact audio
and video were distributed throughout Europe and America by webcast,
receiving 500 connections.

3. ISS Ham Debrief Held with Astronaut Jeff Williams

Expedition 21/22 astronaut Jeff Williams, KD5TVQ participated in an
Amateur Radio on the International Space Station (ARISS) debrief session on Friday, April 9. The feedback he provided on the ISS Ham radio
equipment and school contacts will help the ARISS team improve program
operations.

4. ARISSat Presentation to be Given at Dayton Hamvention

Dayton Hamvention 2010 will be held at the Hara Arena Complex in Dayton,
Ohio on May 14 - 16. The American Radio Relay League (ARRL) and the Radio
Amateur Satellite Corporation (AMSAT) will both man exhibit booths at the
event. Gould Smith, WA4SXM, AMSAT Project Manager for ARISSat-1, plans to
give a presentation at the AMSAT Forum titled, "Getting ARISSat-1 Ready
to Fly." The Dayton Hamvention is an internationally attended amateur
radio convention that draws crowds of 25,000 annually. For more information
on Dayton Hamvention 2010, go to: http://www.hamvention.org/

5. Four Women in Space Hold Amateur Radio Licenses

Shuttle STS-131 launched on April 5, carrying three women into space:
Dorothy Metcalf-Lindenburger, KE5DAT, Stephanie Wilson, KD5DZE and JAXA
astronaut Naoko Yamazaki, KE5DAS. Upon docking with the ISS, they joined

Expedition 23 crew member Tracy Caldwell-Dyson, KF5DBF. This was the first
time that four women have been in space, and all are licensed hams.
Caldwell-Dyson will participate in her first Amateur Radio on the
International Space Station (ARISS) contact with Jessup Elementary
School in Houston on April 19. Let's hope they like to make random
contacts to give the Amateur Community some excitement.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 30. WSR-112 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-04-23 13:38:18 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001b01cae2ea$349f4c00$9ddde400$@net>
Source record: 583
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-112.S1
WSR 112 Part 1 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S1
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04222010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S2
WSR 112 Part 2 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S2
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/

[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====

LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S3
WSR 112 Part 3 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S3
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S4
WSR 112 Part 4 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S4
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 31. ANS-115 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-04-25 01:14:23 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001601cae414$a2158a80$e6409f80$@net>
Source record: 584
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-115

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
* *
* Please be advised that tickets for the AMSAT-TAPR banquet at *
* Dayton will not be sold at the booth. *
* All tickets must be purchased at the AMSAT store *
* http://www.amsat-na.com/store/item.php?id=100158 *
**********

In this edition:

* Reminder: AMSAT Board of Directors Nominations Now Open
* The Dayton $5000 Challenge Extended to September 1
* CubeSat Workshop Videos Can Be Viewed On-line
* Swiss Amateur Radio Cubesat TIsat-1 Ready for Launch
* Operations Team Requests Feedback on VO-52's 5th Anniversary
* SA AMSAT Space Symposium Announces Cubesat Development
* Arecibo EME Wrap Up

SB SAT @ AMSAT $ANS-115.01
Reminder: AMSAT Board of Directors Nominations Now Open

AMSAT News Service Bulletin 115.01
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.01

It is time to submit nominations for the upcoming open seats on the AMSAT--NA Board of Directors. A nomination requires either one Member Society or five current individual members to nominate an AMSAT member for the position. Three director's terms expire this year: Tom Clark,

K3IO, Lou McFadin, W5DID and Gould Smith, WA4SXM. Nominations must be in writing and mailed to: AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910. They can arrive no later than June 15th

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-115.02
The Dayton $5000 Challenge Extended to September 1

AMSAT News Service Bulletin 115.02
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.02

The Dayton Amateur Radio Association (DARA) will match one-for-one any donations made to AMSAT between now and September 1, 2010 up to a maximum of $5,000. Please support "Getting AMSAT Back into Space" and help us raise the funds needed for our next satellite project.

AMSAT's Project "Fox" is a cubesat that will provide a 2 meter-70 Centimeter FM transponder that will match the ground performance of AO-51. You can send your donation to: AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910. If you prefer, you can call Martha at the AMSAT office (US call toll free at 888-322-6728 or 301-589-6062) and contribute with a credit card.

We will be accepting 'Getting AMSAT Back into Space' donations at various hamfests where AMSAT has a presence, including the Hamvention.

You can also make contributions online in the AMSAT Store: http://www.amsat-na.com/store/donation.php

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-115.03
CubeSat Workshop Videos Can Be Viewed On-line

AMSAT News Service Bulletin 115.03
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.03

This week's CubeSat Workshop at Cal Poly has posted many videos of the presentations. At press time videos from the first 2 days are available now: http://www.ustream.tv/channel/CubeSatWorkshop/v3

Among the many presentations available are:

+ NSF Comms Project Update - Bryan Klofas KF6ZEO - SRI International
+ Extending 1U Communications - Kevin Brown - AstroDev
+ Development Approaches for CubeSats - Ehson Mosleh & David Klumpar
Montana State University
+ The Spectrum of Space Projects for Student Education - Robert Twiggs
KE6QMD - Morehead State University
+ Implementation of Deployable Solar Panels on a 1U CubeSat - Abhishek
Bajpayee - University of Louisiana

These videos can be seen at
http://www.ustream.tv/channel/CubeSatWorkshop/v3

Check the website for video of later presentations covering a D-STAR
cubesat OUFTI-1, GENSO and Lunar Lander/Orbiter CubeSats which are
expected to be added at the conclusion of the Cubesat Workshop.

[ANS thanks Bryan Klofas, KF6ZEO and SouthGate News for the above
information]

/EX

SB SAT @ AMSAT $ANS-115.04
Swiss Amateur Radio Cubesat TIsat-1 Ready for Launch

AMSAT News Service Bulletin 115.04
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.04

The Swiss Amateur Radio CubeSat TIsat-1 built by students in Ticino
is ready for launch from India later this spring. TIsat-1 is to be
launched on the PSLV-C15 launcher from the Sriharikota Space Center
(SHAR) in India. It will go into a 670 km sun synchronous orbit with
an inclination of 98.5 degrees.

The radio communications system is based on the Alinco DJC-6 dual
band hand held transceiver. Downlink power will be 400mW on 437.305
MHz. An uplink will be at 145.980 MHz. TIsat-1 will send its call
sign HB9DE in CW and transmit AFSK telemetry from its on-board
experiments.

Experiments are planned for:

+ Monitoring of the durability of exposed thin bonding wires, PCB
tracks and lines (Atomic Oxygen effects).
+ Verification of the system fault tolerance scheme including
algorithms for error detection and correction both for on-board
memories and for communication.
+ Acquisition of spacecraft environment and operating data.
+ Redundancy in the key systems in order to resist space environment
induced effects. The critical hardware functions were replicated and
implemented with different technologies.
+ Careful hardware and software design taking care of latchups and

single-event upsets.
+ Smart self-adaptive software management scheme based on techniques
stemming from Artificial Intelligence.

[ANS thanks TIsat-1, SouthGate ARC News and the IARU Satellite
Coordinator for the above information]

/EX

SB SAT @ AMSAT $ANS-115.05
Operations Team Requests Feedback on VO-52's 5th Anniversary

AMSAT News Service Bulletin 115.05
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.05

This week Mani, VU2WMY Secretary & Station-In-Charge of the Upagrah
Amateur Radio Club VU2URC at the India ISRO Satellite Centre sent a
request on behalf of the Hamsat VO-52 Operations Director.

To commemorate the milestone of Hamsat's VO-52 5 successful years in
space on May 4 the India/ISRO team plans to publish a 'Comprehensive
Performance & Utilization Report' of the VO-52 Transponder based on
user feedback from around the world. Information specifically request-
ed by ISTRAC for the report includes:

1. PERFORMANCE of the HAMSAT TRANSPONDER as _perceived by the users_
2. COMPARISON of the HAMSAT Transponder with her CONTEMPORARIES
3. Details of SATELLITES providing SIMILAR SERVICES
4. Approximate NUMBER OF USERS of HAMSAT in _India / over the globe_
5. GROWTH of HAMSAT USERS, since launch
6. Approximate HAMSAT TRANSPONDER UTILISATION (transponder interaction
period) over the globe (transponder is ON always)
7. Any more INTERESTING INFORMATION on HAMSAT

Send your feedback to Mani, VU2WMY at wmy@isac.gov.in or
vu2wmy_mani@yahoo.com.

[ANS thanks Mani, VU2WMY for the above information]

/EX

SB SAT @ AMSAT $ANS-115.06
SA AMSAT Space Symposium Announces Cubesat Development

AMSAT News Service Bulletin 115.06
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.06

SA AMSAT announced at their recent Space Symposium held at the University of KwaZulu-Natal that it would be building its own CubeSat.

The project will involve radio amateurs, students and learners. At this stage the project will start with inviting input from radio amateurs before the final payload is decided on, and project teams will then be set up. If you are interested in becoming involved, you are invited to send an email with your contact details and areas of expertise to saamsat@intekom.co.za.

The currently proposed payload will include a transponder with a 30 kHz bandwidth, a telemetry beacon and science projects.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-115.07
Arecibo EME Wrap Up

AMSAT News Service Bulletin 115.07
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.07

While not strictly amateur satellite related, another aspect of amateur radio in space includes EME operations. Many amateur satellite operators participated in the recent EME test from Arecibo and may be interested in this.

Joe Taylor K1JT wrote to the EME community on the memorable KP4AO amateur radio moon bounce operation from the Arecibo Observatory in Puerto Rico, "Many thanks to all stations we worked from KP4AO -- and our apologies to the many more who called without completing a QSO. The Arecibo telescope's short moon windows were frustrating for all, ourselves included."

Joe descibed the "wall" of stations calling as simply incredible. A rough estimate suggests that we may have worked something like 20% of the callers potentially workable on SSB, 10% of those workable on CW, and only a few percent of those workable on JT65. I guess we'll have todo it again, in due course.

The KP4AO log shows nearly 240 completed QSOs with some 57 DXCC entities, in a total of 8 operating hours. The team made recordings of the whole 432 MHz EME sub-band for for most of the time KP4AO was on the air. In due course it will be possible to "tune the band" carefully, many times, picking out callsigns.

Joe continued, "Here's a request for all ...

1. If you worked us with a setup significantly smaller than is normally required for EME, please send me a short note describing

your antenna, receiver, and Tx power to joe@Princeton.EDU

2. If you copied us with a small setup, please send me details on
your antenna and receiver.

I know we worked and were heard by some pretty small setups, and I'd
like to document some of them for a write-up in QST."

Members of the Arecibo Observatory Amateur Radio Club who constructed
and operated the KP4AO station for this event:
Angel, WP3R
Pedro, NP4A
Angel, WP4G
Jim, WA3FET
Joe, K1JT
Additional guest operator: Pat, AA6EG

The WSJT software for operating JT-65B by K1JT can be downloaded
from http://www.physics.princeton.edu/pulsar/K1JT/

Many thanks, and see you on the moon!
73, Joe, K1JT

[ANS thanks Joe, K1JT for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that
please keep in mind the lament of the fellow who didn't pass his exam,
"I'll never take another ham radio code test," Tom said without remorse.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 32. Earth-like planets?

Newsgroup: rec.radio.amateur.space
Date: 2010-04-30 07:04:06 UTC
From: Bojutsu1@webtv.net
Message-ID: <14891-4BDA80E6-3874@storefull-3173.bay.webtv.net>
Source record: 585

If anyone is still active here, is there a listing of the so far potential Earth-like or habitable range potential rocky planets with a jupiter-like commet-catching further out planet?

I have foudn individual articles of possible planets around other stars but no listing of them all in one list. Does anyone know of a website with such a listing, maybe showing the light-year distances? Thanks.

Bo

## 33. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-05-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1272693601@panix.com>
Source record: 586
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 34. WSR-120 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-05-02 14:04:36 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001601caea00$5d752ba0$185f82e0$@net>
Source record: 587
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-120.S1
WSR 120 Part 1 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S1
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04302010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-120.S2
WSR 120 Part 2 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S2
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO

Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/

[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====

LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-120.S3
WSR 120 Part 3 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S3
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-120.S4
WSR 120 Part 4 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S4
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 35. ANS-122 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-05-02 15:55:28 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <006301caea0f$ddc6c200$99544600$@net>
Source record: 588
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-122

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

**********
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
* Booth and activities. For the latest information go to: *
* http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php *
* *
* Please be advised that tickets for the AMSAT-TAPR banquet at *
* Dayton will not be sold at the booth. *
*All tickets must be purchased at the AMSAT store by Monday, 10 May*
* http://www.amsat-na.com/store/item.php?id=100158 *
**********

In this edition:
* Successful ARISS Contact With European School in European Parliament
* H-IIA Rocket to Launch Four Cubesats
* Nanosatellite Launch Service 6 on PSLV-C15
* Satellite Shorts From All Over
* ARISS Status - 26 April 2010

SB SAT @ AMSAT $ANS-122.01
Successful ARISS Contact With European School in European Parliament

AMSAT News Service Bulletin 122.01
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.01

On Tuesday, April 27 students of the European School II, Brussels enjoyed a successful Amateur Radio on the International Space Station (ARISS) contact with Astronaut Tim Creamer, KC5WKI operating the Amateur Radio station NA1SS aboard the International Space Station. The ISS was over South America during the contact with Adrian Sinclair's ARISS

Telebridge station LU1CGB in Buenos Aires providing a solid earth station link. Twelve students selected from the school completed the contact.

ARISS Chairman Gaston Bertels, ON4WF hosted the event at the European Parliament in Brussels as a feature of a cultural exhibition set up in collaboration with the International Amateur Radio Union, the European Space Agency and sponsored by MEP Birgit, Sippel, Germany. The IARU Exhibition's name is "European Amateur Radio Benefiting Society" with the theme of Emergency, Education and Space.

Because of the high profile of the location of the event at the European Parliament Building in Brussels there was considerable opportunity to raise awareness through media coverage, especially with Brussels European School's 'model' schooling for Europe.

This chance to participate in an ARISS project was actively embraced by the Science faculty and it is here where the opportunities for curricular integration are gaining momentum. In the 1st Year Secondary (typically aged 11) students study forces, gravity, weight and basic ideas about 'fields'. In the 2nd Year, studies of the Solar System, and well beyond, link directly to the Shuttle missions and the International Space Station. In Year 7 (the final Baccalaureate year, when most students are aged 18) the Physics section on 'Gravitational Fields' is mainly about the mechanics of planetary and satellite motion. Topics (and questions) are often presented within the context of NASA and ESA missions.

Reporting from Brussels, Gaston wrote, "In the European School, located in a residential area of Brussels, a similar setup was provided and many students listened in to the event live. Later in the same afternoon, ISS crew members came to visit the exhibition. ISS Commander Frank De Winne, ON1DWN, Robert Thirsk, VA3CSA and Roman Romanenko, each one representing a different Space Agency participated in a live question and answer session with a group of students from the European School and from another school."

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crew members onboard the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crew members on ISS can energize youngsters' interest in science, technology and learning.

Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

[ANS thanks ARISS Chairman Gaston Bertels, ON4WF; David Jordan, AA4KN; and ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-122.02
H-IIA Rocket to Launch Four Cubesats

AMSAT News Service Bulletin 122.02
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.02

Four CubeSats in Japan are planning to launch on 17 May 2010
together with PLANET-C which belongs to JAXA by H-IIA rocket.

Launch date, 17 May 2010
Launch time, 21:44:14UTC
Launch site, Tanegashima Space Center in Japan

http://www.jaxa.jp/press/2010/03/20100303_h2af17_e.html
http://www.jaxa.jp/index_e.html

Three of the CubeSats, Negai*", WASEDA-SAT2, KSAT, being launched by
the H-IIA rocket on May 17 will be dropped off into a low earth orbit
but UNITEC-1 will continue following the JAXA's Venus Climate Orbiter
PLANET-C / AKATSUKI on its journey to Venus.

UNITEC-1, NPO UNISEC (University Space Engineering Consortium)
5.840GHz, travel into deep space towards Venus
http://www.unisec.jp/unitec-1/en/top.html

Negai*", Soka University
437.305MHz CW, Packet 1200bps FSK AX.25
http://kuro.t.soka.ac.jp/main.html

WASEDA-SAT2, Waseda University
437.485MHz CW(FM), PCM-FSK(FM) 9600bps
http://www.miyashita.mmech.waseda.ac.jp/Waseda-Sat2/index.htm

KSAT, Kagoshima University
Uplink: S-band(2GHz, 10kbps), Downlink: Ku-band(13.275GHz, 10kbps/1Mbps)
http://www.sci.kagoshima-u.ac.jp/~nishio/download/Ukaren2008Nishio.pdf

[ANS thanks Mineo, JE9PEL, for the above information]

/EX

SB SAT @ AMSAT $ANS-122.03
Nanosatellite Launch Service 6 on PSLV-C15

AMSAT News Service Bulletin 122.03
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.03

The Space Flight Laboratory (SFL) at the University of Toronto Institute for Aerospace Studies (UTIAS) would like to announce the delivery of Nanosatellite Launch Service 6 (NLS-6) cluster payload to Satish Dhawan Space Centre in Sriharikota (SDSC-SHAR), Andhra Pradesh, India, for launch on board PSLV-C15. PSLV-C15 will be launching from the First Launch Pad at SDSC-SHAR into 637 km sun-synchronous orbit with 10:30 Local-Time of Descending Node. NLS-6 shares this launch with Cartosat-2B primary, Alsat-2A co-primary, and STUDSAT auxiliary payload.

NLS-6 is the 6th launch by SFL. The NLS-6 cluster comprises of two nanosatellite: AISSat-1 and TIsat-1.

NLS-6 launch updates are being posted to
http://www.utias-sfl.net/NLS-6/

About AISSat-1
---
AISSat-1 is built by SFL for the Norwegian Defence Research Establishment (FFI). It is intended to demonstrate a new maritime AIS receiver that has been developed by FFI. The AIS receiver will be used to monitor ship traffic in Norwegian waters. The design of AISSat-1 is based on SFL Generic Nanosatellite Bus (GNB).

The spacecraft has a main structure measuring 20 cm by 20 cm by 20 cm and it is stabilized in three-axes using reaction wheels. It has a fixed 46 cm long VHF payload monopole antenna for the AIS receiver and four UHF uplink monopole antennas for the command receiver. The downlink in the S-Band. AISSat-1 has an overall dimension of 80 cm by 45 cm by 37 cm and an overall mass of 6.5 kg. AISSat-1 will be secured to the launch vehicle using the XPOD GNB separation system.

AISSat-1 is not an amateur satellite and, as such, has coordinated appropriate frequencies. Its ground segment is located at Svalbard and its control centre is at FFI, near Oslo, Norway.

More information on the spacecraft can be found at
http://www.utias-sfl.net/nanosatellites/AISSat-1/
and
http://www.spacecentre.no/?module=Articles;action=Article.publicShow;ID=5138
9

About TIsat-1
---
TIsat-1 is a 1 kg CubeSat of 10 cm by 10 cm by 10 cm and is built by students and staff at University of Applied Sciences of Southern Switzerland (SUPSI). The primary mission objective is to involve students in systems engineering, development and test with a very challenging project and to provide students and staff at SUPSI with space mission knowledge. TIsat-1 will monitor the durability of material probes exposed to space environment, will test a micro electromechanical device and will validate the redundant, fault tolerant hardware and firmware design of the bus.

Two monopole antennas (VHF and UHF) will be deployed after separation. Housekeeping and payload data will be communicated to the ground as orbital data profiles. TIsat-1 will be secured to the launch vehicle using the XPOD Single separation system.

TIsat-1 communicates over amateur radio frequencies, as coordinated through the IARU, and they have been working with radio amateurs in Switzerland during the spacecraft's development. They have a Morse Code and data beacons. More information can be found at http://www.spacelab.dti.supsi.ch/tiSat1.html

Future Launches by SFL
---
SFL has signed its 7th launch contract with ANTRIX for NLS-7 in late 2010/early 2011. NLS-7 will launch the twin-satellite CanX-4 and CanX-5 formation flying mission.

SFL will be signing its 8th launch contract for NLS-8 momentarily, for the launch of two astronomy nanosatellites: BRITE-Austria (CanX-3A) and UniBRITE (CanX-3B). NLS-8 will also launch one partner spacecraft.

In addition, SFL is under discussion for NLS-9, NLS-10, and NLS-11 launches in 2011/2012 time frame, and would like to extend an invitation to spacecraft developers world-wide to join our launches.

For further information, please contact:
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Manager, Advanced Systems Group
UTIAS Space Flight Laboratory
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+1-416-667-7890 Voice
+1-416-667-7799 Fax
freddyp@utias-sfl.net
http://www.utias-sfl.net/

[ANS thanks Daniel, VA3KKZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-122.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 122.04
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.04

+ Hiroyuki, JG7PSJ will be QRV as JD1BMH from Chichijima, IOTA AS-031, from May 2 to 14. Activity is on 40 to 6 meters, and possibly 80 meters, using CW, SSB and digital modes. QSL to home call. In addition, Makoto, JI5RPT will be QRV as JD1BLY, also from Chichijima, from May 2 to 7. Activity will be on 40 to 6 meters using CW, SSB, digital modes and Satellites. QSL

to home call. (via ARRL ARLD017 DX news)

+ Congratulations to Loren, K7CWQ, who just received his VUCC
award - using a FT-60R and Arrow Sat antenna as his station.
Well done, sir!

+ Also congratulations to KD0EM, Harold in EL98 Florida. On April 22
he worked W4AS for his first satellit contact via AO-27 FM.

+ Martha reminds us from AMSAT HQ that tickets for the AMSAT-TAPR
banquet at Dayton will not be sold at the booth. All tickets must
be purchased at the AMSAT store by Monday, 10 May:
http://www.amsat-na.com/store/item.php?id=100158
Dr. Robert McGwier, N4HY, will be the Banquet speaker

+ Gavin, M1BXF reports the Camb-hams, the social side of the Cambridge
Repeater Group (ex Pye telecoms group) will be active on FM and SSB
satellites as GS3PYE/P from grid IO67nt on the Island of Harris
Scotland between May 1st and May 15th. More information can found
on their DXpedition webpage:
http://dx.camb-hams.com/dx-peditions/harris-dxpedition-10/

+ A video has been released that explains the design philosophy of the
core power control unit of New Zealand's first Amateur Radio satel-
lite KiwiSAT. In the video Hans Holtz ZL1HB and Andrew Cammell ZL1AVC
explains the design and operation of the KiwiSAT central power con-
trol system know as the Battery Control Regulator or BCR. Watch at:
http://tinyurl.com/28ocp8h

+ The Radio Club Ushuaia LU8XW is planning an expedition to the City
of Tolhuin, commemorating the 25th anniversary of the radio club.
LU8XW will be active in SSB, CW, PSK, RTTY and Satellites, from
01:00 UTC May 22 until 03:00 UTC May 24. QSLs via WD9EWK and LoTW
(IOTA SA 008) - (W.A.P. - W.A.C.A Ref ARG-23) All contacts on this
expedition are all contacts are valid for Radio Club Ushuaia
Permanent Diploma. Please sen dany questions or comments to
lu8xw@lu8xw.com.ar Please visit our web www.lu8xw.com.ar Thanks!
Pablo LU6XV SOURCE: 73 de Augusto HB9TZA / I2JJR - SRT

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-122.05
ARISS Status - 26 April 2010

AMSAT News Service Bulletin 122.05
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.05

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Nippon Boy Scout Amateur Radio Club in Mitaka-shi, Japan on Tuesday, May 4 at 15:09 UTC. The Japan Boy Scouts have an amateur radio club,
JA1YSS and study amateur radio station operations. The boys look forward to speaking with JAXA astronaut Soichi Noguchi, a former Boy Scout.

The Smithsonian Institution National Air and Space Museum (NASM) in Washington,
D.C. has been scheduled for an Amateur Radio on the International Space Station
(ARISS) contact on Family Day, Saturday, May 8 at 17:01 UTC via VK4KHZ in Australia. The Education Division of NASM is recruiting the young people who will participate in the contact. Generally, Boy Scouts and other groups are involved with this activity. The Museum draws approximately 30,000 on this Saturday in May.

2. Caldwell-Dyson Speaks with Houston School via ARISS

On Monday, April 19, Expedition 23 astronaut Tracy Caldwell-Dyson, KF5DBF participated in an Amateur Radio on the International Space Station (ARISS) contact with students from Jessup Elementary School in Houston, Texas. The connection was made through telebridge station WH6PN in Hawaii. Prior to the contact, ARISS was incorporated into science, math, and language arts classes
and children prepared 20 questions for the astronaut. Caldwell-Dyson answered
them all as a crowd, filling the school's gymnasium, listened in. Several newspapers also attended and covered the event.

3. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, April
20. Topics of discussion included an update on the radio equipment for the Columbus Module and an ARISSat-1 status. Minutes have been posted. See: https://www.rac.ca/ariss/arisstel2010-04-20.htm

4. Astronaut Training Status

On Monday, April 19, astronauts Kevin Ford and Shane Kimbrough received an overview of the Amateur Radio on the International Space Station (ARISS) program, followed by a Basic Ops session with Kimbrough. Both astronauts are scheduled to fly on future ISS expeditions.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are

available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

## 36. WSR-127 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-05-07 13:46:05 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001101caedeb$9c48bab0$d4da3010$@net>
Source record: 589
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-127.S1
WSR 127 Part 1 045/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S1
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05072010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-127.S2
WSR 127 Part 2 05/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S2
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05072010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/

[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====

LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-127.S3
WSR 127 Part 3 05/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S3
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-127.S4
WSR 127 Part 4 05/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S4
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 37. Radio Meteor Obs. Bull. April 2010 Lyrids

Newsgroup: rec.radio.amateur.space
Date: 2010-05-08 18:31:26 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <8ebbu5pcgnkhd8j5bncrim9gms4p3slqo4@4ax.com>
Source record: 590
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 201 of April 2010 (88 K) is available now as

http://www.rmob.org/rmobtext/rmob1004.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 38. ANS-136 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-05-16 05:24:00 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000d01caf4b7$f84822b0$e8d86810$@net>
Source record: 591
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-136

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Forum at Dayton - News of Amateur Radio in Space
* Reminder: The Dayton $5000 Challenge Extended to September 1
* Two More Astronaut Hams
* IARU Publishes Revised Requirements for the Amateur Satellite Service
* Venus Bound UNITEC-1 Amateur Radio Forum Web Pages Established
* AMSAT-India Reports Several University Cubesats Under Development
* Vietnamese CubeSat Under Development
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-136.01
AMSAT Forum at Dayton - News of Amateur Radio in Space

AMSAT News Service Bulletin 136.01
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.01

This weekend was the Dayton Hamvention and one of the features included the 2010 AMSAT Forum on Saturday, May 15 from 11:15 am to 1:30 pm. See the list of topics introduced by AMSAT Board Member Alan Biddle, WA4SCA:

Barry Baines, WD4ASW, AMSAT President, presented the "AMSAT Status Report" as a mid-year update about what is happening within AMSAT. Barry highlighted current activities within AMSAT and discusses some of the challenges facing the organization.

Drew Glasbrenner, KO4MA, AMSAT VP Operations, told attendees about "AMSAT Satellite Operations and International Satellite Operations". Drew discussed operational AMSAT satellites and updates on new and future International Satellites.

Mike Forsythe, AC2V, Team Leader of the successful K4T DXpedition spoke about "Integrating Satellite Operations into DXpeditions". Mike discussed how to have satellite operations as a major part of DXpeditions,involving youth and making it all work on green power!

Gould Smith, WA4SXM,AMSAT VP User Services, and AMSAT Project Manager for ARISSat-1 spoke on "Getting ARISSat-1 Ready to Fly". Gould's talk covered the current status of the satellite project, testing and the delivery of two satellites to Russia in July.

Alex Harvilchuck, N3NP, Systems Engineer with IBM, and the NextGen CubeSat Program Manager reported progress on the "NextGen CubeSat Program Update". A team of Binghamton University engineering students have been modifying the power systems from ARISSat-1 for use in a 3U CubeSat, with a U/V linear transponder, for AMSAT.

Watch for more AMSAT news from Dayton in future ANS reports!

[ANS thanks AMSAT Team at Dayton for the above information]

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SB SAT @ AMSAT $ANS-136.02
Reminder: The Dayton $5000 Challenge Extended to September 1

AMSAT News Service Bulletin 136.02
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.02

The Dayton Amateur Radio Association (DARA) will match one-for-one any donations made to AMSAT between now and September 1, 2010 up to a maximum of $5,000. Please support "Getting AMSAT Back into Space" and help us raise the funds needed for our next satellite project.

AMSAT's Project "Fox" is a cubesat that will provide a 2 meter-70 Centimeter FM transponder that will match the ground performance of AO-51. You can send your donation to: AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910. If you prefer, you can call Martha at the AMSAT office (US call toll free at 888-322-6728 or 301-589-6062) and contribute with a credit card.

We will be accepting 'Getting AMSAT Back into Space' donations at various hamfests where AMSAT has a presence, including the Hamvention. You can also make contributions online in the AMSAT Store: http://www.amsat-na.com/store/donation.php

[ANS thanks Martha at the AMSAT Office for the above information]

/EX

SB SAT @ AMSAT $ANS-136.03
Two More Astronaut Hams

AMSAT News Service Bulletin 136.03
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.03

The ARISS Status Report this week says two more astronauts have
received their Amateur Radio Licenses.

Ron Garan of Expedition 27 completed testing for his amateur radio
license and has been issued KF5GPO.

Kevin Ford has been issued the callsign of KF5GPP and is currently
training for a future expedition crew assignment.

Andre Kuipers had an ISS amateur radio review session on May 4 in
preparation for his tour on the ISS as part of the Expedition 30 crew.
Don Pettit will join him as part of that crew.

[ANS thanks ARISS for the above information]

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SB SAT @ AMSAT $ANS-136.04
IARU Publishes Revised Requirements for the Amateur Satellite Service

AMSAT News Service Bulletin 136.04
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.04

In preparation for frequency allocation negotiations the IARU has pub-
lished a full specification at http://www.iaru.org/ac-09spec.pdf

Items of interest to the Amateur Satellite Service include:

+ An allocation for the Amateur Satellite Service is sought in the
50-54 MHz range to bridge the gap between 28 MHz and 144 MHz.

+ The Amateur Service requires retention of the existing allocations
in the 420-450 MHz band and opposes new uses by other services or
low-power devices except where sharing or compatibility studies
have been satisfactorily concluded. Because of the crowding of the
existing band 435-438 MHz with unmanned amateur satellites and
manned space stations, it is desirable to study expansion of the
band.

+ The Amateur Service seeks retention of the band 1240-1300 MHz. The
Amateur-Satellite Service seeks retention of the band 1260-1270 MHz
and deletion of the "Earth-to-space only" restriction.

[ANS thanks Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-136.05
Venus Bound UNITEC-1 Amateur Radio Forum Web Pages Established

AMSAT News Service Bulletin 136.05
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.05

As reported previously, on May 17 Japan's Space Agency JAXA plans to launch its Planet-C Venus Climate Orbiter "AKATSUKI" mission to Venus. Also aboard will be UNITEC-1, a 15 kg, 35cm cubed nano-satellite developed by twenty-two universities and colleges of UNISEC (University Space Engineering Consortium).

UNITEC-1 be inserted into a Venus encounter trajectory and will become the world first university satellite which goes beyond Lunar orbit. The main mission of UNITEC-1 is to perform technological experiments of on-board computers and test long-range, inter-planetary communication using amateur radio frequencies:

Downlink Frequency: 5840.000MHz, band width 20MHz
Transmission Power: 4.8W/antenna, 9.6W total
Antenna: 2 Microstrip patch antennas
Modulation: AFSK/FM 1200bps during LEO flight
CW 1bps during Interplanetary flight
Callsign: JQ1ZUN

UNITEC will rely heavily on amateur radio stations around the world to receive its microwave downlink signal. The team has created an Amateur Radio forum which is planned to evolve into a site for the latest information as well as provide a path to upload received data.
See: http://sites.google.com/site/unitec1ops/amservice

Software to aid in the tracking of the satellite and decoding the received telemetry is posted at:
http://sites.google.com/site/unitec1ops/swdownload
This includes the Initial Orbit Estimation Sheet, Unitec 1 Orbit Estimation, and Receiving Data Analyzer

A forum to upload received UNITEC-1 data is under construction at:
http://sites.google.com/site/unitec1ops/amservice/amuploader

Many additional details are available on the UNITEC-1 Operations page:
http://sites.google.com/site/unitec1ops/

The UNITEC-1 team will use a special version of Spectran, that produces a log file of all the frequency peaks found. This will allow them to do an offline analysis. You can download this special version of Spectran from I2PHD, Alberto's site:
http://www.weaksignals.com

[ANS thanks the UNITEC-1 Team and Alberto, I2PHD for the above information]

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SB SAT @ AMSAT $ANS-136.06
AMSAT-India Reports Several University Cubesats Under Development

AMSAT News Service Bulletin 136.06
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.06

AMSAT-India attended the first Indian Small Satellite Systems Con-
ference at ISRO Bangalore. VU2POP reported that 26 univerities in
India have established amateur radio clubs and are in various stages
of Amateur Radio Satellite development.

VU2POP wrote, "As of now most of the university satellites are either
digital with only beacon downlink and no voice transponder. AMSAT
India has two linear tranponders ready. We are asking ISRO for a higher
orbit to cover a larger foot print and longer pass duration for future
AMSAT-India satellites".

As a reminder, on VO-52's 5th Birthday the HAMSAT team and ISTRAC has
requested user feedback from the Amateur Radio community. Send your
feedback to Mani, VU2WMY at wmy@isac.gov.in or vu2wmy_mani@yahoo.com.

[ANS thanks AMSAT-India Technical Director, Pop VU2POP for the above
information]

/EX

SB SAT @ AMSAT $ANS-136.07
Vietnamese CubeSat Under Development

AMSAT News Service Bulletin 136.07
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.07

News has been received from Vu Trong Thu, XV9AA, in Hanoi of a
Vietnamese 2U CubeSat under development. Thu wrote, "We hope to
complete the F-1 satellite by the end of 2010 and launch it to
Sun-synchronous, 98 deg inclination LEO. At the moment we are
negotiating with several launch providers to find a way into
orbit but the high launch cost is really an issue. If we can
solve the budget issue, we'll be ready to launch our cubesat
in 2011."

The satellite carries several low-resolution cameras to take photos
of the Earth along with temperature and magnetic sensors to study
space environment. Some of the project goals for the F-1 satellite
include:
+ Students to learn about aerospace engineering.
+ Demonstrate the application of COTS products to reduce cost and

time developing a small satellite.
+ Survive in space environment for at least a year.

The satellite will use amateur VHF and UHF frequencies. The IARU has coordinated at downlink frequency of 437.485 MHz to support a 1200 baud AX.25 telemetry link. The F-1 satellite will also transmit a beacon using a modulated Morse code audio signal on FM carrier when it is not in range of the earth station in Hanoi. In case of emergency, DTMF tones can be used to control the satellite to some extent. The satellite also carries a COTS transceiver (using UHF frequency) from Microhard Systems to experiment with higher data transmission speed.

A breadboard model of the satellite has been built and the communication link has been tested at a range of 50km. The team is now working on the Engineering Model of the satellite and more tests are planned including shock, vibration and thermal tests.

The F-1 team leader Thu can be reached at: thuvt@fpt.com.vn
Their web page is at: http://fspace.fsoft.com.vn/

[ANS thanks Thu, XV9AA for the above information]

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SB SAT @ AMSAT $ANS-136.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 136.08
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.08

+ This week the ISS activated SSTV over Europe for the MAI-75 experiment. If you have received images please send them via the ARISS SSTV submission page: http://www.amsat.org/amsat/ariss/SSTV/submit.php
Also see the ARISS SSTV gallery page:
http://www.amsat.org/amsat/ariss/SSTV/

+ NASA Science News says a unique sky view will be visible as Venus and the Moon are gathering for a sunset conjunction on Sunday, May 16th. On that night, the ISS is going to be flying over many US towns and cities. And if space shuttle Atlantis launches on schedule people could witness a rare meeting of the shuttle, station, Venus and the Moon. Details and observing tips may be found in the story from Science@NASA: http://tinyurl.com/334954k

+ Congratulations to Bobby, KF4GTA for being selected to participate in NASA's STS-132 Tweetup from the final launch of the space shuttle Atlantis which took place on Friday, May 14. Bobby's tweets were published at: http://www.twitter.com/kf4gta

+ UniverseToday has posted a very interesting video hosted by Astronaut Mike Massimino about what he describes as, "This is the deepest,

darkest secret about spaceflight. People always ask us about UFOs and aliens, and we've got nothing for them. But they don't know about this!" Watch at: http://tinyurl.com/25gdzxq (UniverseToday.com)

+ The Camb-Hams DX'Pedition to Harris 2010 operated on satellites. They have a video of us assembling the HyGain 2m and 70cm OSCAR antennas on a 2 inch mast at about 12 feet. Watch - How To Build Satellite Antennas in 30 Seconds at http://tinyurl.com/23mmvww (SouthGate ARC)

+ Henk Hamoen PA3GUO has made available some videos about Amateur Radio CubeSats. See: http://tinyurl.com/2gybunt (SouthGate ARC)

+ A YouTube video shows how to use WebSDR which enables you to receive the LF and HF amateur radio bands via a web controlled receiver that supports multiple users. WebSDR is a free website that anyone can use to receive short wave ham radio. It will function on SSB and CW modes. Watch at: http://tinyurl.com/23ol4j7 (Please click the quality button and raise it to 720p before making the video full screen to see all the details. The WebSDRs can be found on-line at: http://www.websdr.org.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind the radio amateur who was LED to believe it was a good time for this humor: His friends were shocked and their stomach did flip-flops but he soon rectified the situation and that phase soon passed. We were no longer choked up and encountered no more impedance to our progress.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 39. WSR-135 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-05-17 14:15:37 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000601caf5cb$5fe2dd70$1fa89850$@net>
Source record: 592
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-135.S1
WSR 135 Part 1 05/15/2010

AMSAT NEWS SERVICE BULLETIN 135.S1
FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-1357.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05152010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

STS-132 Shuttle Mission:
Commander: Ken Ham
Pilot: Tony Antonelli
Mission Specialist-1: Garrett Reisman KE5HAE
Mission Specialist-2: Michael Good
Mission Specialist-3: Steve Bowen
Mission Specialist-4: Piers Sellers

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05152010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-135.S2
WSR 135 Part 2 05/15/2010

AMSAT NEWS SERVICE BULLETIN 135.S2
FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-135.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn

[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895

Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05152010]
=====
QuakeSat

Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

STS-132 Shuttle Mission:
Commander: Ken Ham
Pilot: Tony Antonelli
Mission Specialist-1: Garrett Reisman KE5HAE
Mission Specialist-2: Michael Good
Mission Specialist-3: Steve Bowen
Mission Specialist-4: Piers Sellers

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05152010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-135.S3
WSR 135 Part 3 05/15/2010

AMSAT NEWS SERVICE BULLETIN 135.S3
FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-135.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847

Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems

Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW

[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-135.S4
WSR 135 Part 4 05/15/2010

AMSAT NEWS SERVICE BULLETIN 135.S4
FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-135.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929

Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

## 40. ANS-143 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-05-24 15:06:19 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000401cafb52$8ac421c0$a04c6540$@net>
Source record: 593
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-143

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Please Do Not Use AO-51 While the Satellite is in Eclipse
* Maryland-DC PICetSat Balloon Launch on May 29
* AMSAT Videos From Dayton Hamvention
* Downlink Signal Successfully Received From Venus-bound UNITEC-1
* Report on ARISS Contact at the National Air and Space Museum
* AMSAT-DL Symposium and AGM
* NASA Listens One More Time for Phoenix
* ARISS Status - 17 May 2010

SB SAT @ AMSAT $ANS-143.01
Please Do Not Use AO-51 While the Satellite is in Eclipse

AMSAT News Service Bulletin 143.01
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.01

After a brief outage on May 16 the AO-51 Command Team has turned the repeater back on on AO-51, including the 67 Hz PL mode. The Command Team has a favor to ask of our Southern Hemisphere users, including those in South America, Southern Africa, Australia, and New Zealand:

Please avoid using AO-51 while the satellite is eclipsed.

Most tracking programs indicate illuminated or eclipsed states, and it can always be found by whether the footprint of the satellite is

crossing or in contact with the footprint of the sun. Generally this
is occurring when the satellite is South of 30 degrees South latitude
at present. AO-51 eclipses are predicted to reach almost 20 minutes
by July 2010.

AMSAT-NA VP of Operations, Drew Glasbrenner, KO4MA said, "I realize
this is a large favor to ask, but the alternative right now is moving
to a scheduled type operation, which I would like to avoid. Please pass
this to your friends, other users you know, and your national satellite
email lists and forums."

For this summer eclipse season, the eclipsed periods are while AO-51 is
over mostly unoccupied Antarctica and surrounding areas. This means when
the batteries alone are supporting the transmitter there are not likely
to be any users. The power management software combined with the PL,
should mean the satellite's batteries can be protected from
over-discharge,
while still providing the strongest possible downlink signal and highest
possible availability.

Observations from the southern hemisphere while entering and leaving
eclipse are very helpful. Post your reports on the AMSAT-BB or e-mail
your report to the AO-51 Control Team via ao51-modes@amsat.org. AO-51
operators also monitor the Live OSCAR Satellite Status page
(http://oscar.dcarr.org/). Analysis of AO-51's Whole Orbit Data (WOD)
files shows the distribution of the satellite's users.
See: http://tinyurl.com/2ehbxv5

If the eclipse periods get too long too fast the repeater may shut off
due to a low battery voltage watchdog. If this happens, please email
Drew directly via ko4ma@amsat.org.

Read the latest AO-51 Control Team News at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-143.02
Maryland-DC PICetSat Balloon Launch on May 29

AMSAT News Service Bulletin 143.02
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.02

If you're in the Washington DC - Maryland area you're invited to join
Pat Kilroy, N8PK for a PICetSat Lite balloon launch on Saturday, May 29
at about 10:00 AM EDT.

Pat says the launch site can be any place in Carroll County, Maryland.
Coordination will be on the 145.410 MHz K3PZN/R machine in Westminster,

MD. (backup 147.285 MHz machine in Sykesville, MD). We will launch anything you wish with a microcontroller attached, so your ideas are welcome. RSVP by May 27 to pat@patkilroy.com.

Pat has posted some background info: http://simsat.net.

[ANS thanks Pak, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-143.03
AMSAT Videos From Dayton Hamvention

AMSAT News Service Bulletin 143.03
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.03

David Jordan, AA4KN, ARISS Public Relations requested David Larsen, KK4WW, to produce informative videos while attending the 2010 Dayton Hamvention.

One video features AMSAT Treasurer, Keith Baker KB1SF describing AMSAT's efforts in Cubesat development. The Cubesat video can be viewed on-line at http://www.youtube.com/watch?v=DpyEhw-vI

The second video is David's interview with AMSAT VP of User Services, Gould Smith WA4SXM where he discusses in detail the upcoming ARISS satellite, ARISSat-1. This can be viewed on-line at: http://www.youtube.com/watch?v=DfSCw6VcU

David would like to thank David Larsen with the LCF Group and a director of the Foundation for Amateur International Radio Service (www.fairs.org),
for his time in producing these videos.

[ANS thanks David Jordan, AA4KN for the above information]

/EX

SB SAT @ AMSAT $ANS-143.04
Downlink Signal Successfully Received From Venus-bound UNITEC-1

AMSAT News Service Bulletin 143.04
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.04

JAXA successfully launched the seventeenth H-IIA mission on May 21 (JST) carrying the Planet-C Venus Climate Orbiter a Venus probe, the experimental "Ikaros" space sail, a Venus-bound University satellite called UNITEC-1 and 3 small satellites also developed by Japanese

universities and other institutions delivered to low earth orbit:

Negai*", Soka University
437.305MHz CW, Packet 1200bps FSK AX.25
http://kuro.t.soka.ac.jp/main.html

WASEDA-SAT2, Waseda University
437.485MHz CW(FM), PCM-FSK(FM) 9600bps
http://www.miyashita.mmech.waseda.ac.jp/Waseda-Sat2/index.htm

KSAT, Kagoshima University
Uplink: S-band(2GHz, 10kbps), Downlink: Ku-band(13.275GHz, 10kbps/1Mbps)
http://www.sci.kagoshima-u.ac.jp/~nishio/download/Ukaren2008Nishio.pdf

UNITEC-1 be inserted into a Venus encounter trajectory and will become the world first university satellite which goes beyond Lunar orbit. The main mission of UNITEC-1 is to perform technological experiments of on-board computers and test long-range, inter-planetary communication using amateur radio frequencies:

Downlink Frequency: 5840.000MHz, band width 20MHz
Transmission Power: 4.8W/antenna, 9.6W total
Antenna: 2 Microstrip patch antennas
Modulation: AFSK/FM 1200bps during LEO flight
CW 1bps during Interplanetary flight
Callsign: JQ1ZUN

News posted on the UNITEC-1 Operations Center web page reports that its CW and FSK signal have been received from a distance of approximately 300,000 km by Japanese ground stations on its first pass over Japan kept from 16:15 (JST) to 25:15 (JST) at 21st May. Their signal report indicated the measured downlink frequency of 5839.91 MHz which is down slightly from the design frequency of 5840.00 MHz. The UNITEC team will continue to work on refining receiving and recording techniques as well as tracking and orbital determination.

You can find the latest UNITEC-1 mission news on the team's operation center website: http://sites.google.com/site/unitec1ops/ This also includes a link to their software page where a telemetry data decoder program is available.

Several universities with access to big dishes have expressed interest in creating a network of ground stations to track UNITEC-1 on its flight to Venus and continuing once the satellite is in orbit around the planet. This is still under development at press time and progress will be reported in future ANS bulletins. A radio link budget is under study to help amateur radio stations develop their capability to receive this interplanetary signal.

Pat Barthelow, AA6EG has developed a Facebook Event Page which he calls "UNiTEC-1 VENUS PROBE COMMUNICATIONS" at:
http://www.facebook.com/event.php?eid4468414245469&index&#65533;
[ANS thanks the UNITEC-1 Operations Team and SpaceDaily.com

For the above information]

/EX

SB SAT @ AMSAT $ANS-143.05
Report on ARISS Contact at the National Air and Space Museum

AMSAT News Service Bulletin 143.05
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.05

ARRL Maryland-DC Section Manager, Jim Cross, WI3N published news of the successful ARISS contact in the "The MDC Section News".

Thanks to Bob Curran, KE3GG for submitting this report ...

On Saturday, May 8, the Smithsonian National Air and Space Museum held a public ARISS contact. The contact was part of their participation in the annual Lockheed Martin Space Day event.

Fifteen Boy Scouts from Troop 417 of Waldorf, MD were given the opportunity to speak directly to astronaut Tracy Caldwell Dyson, KF5DBF, aboard the International Space Station (ISS) via amateur radio. The contact was facilitated via ground station VK4KHZ in Australia.

Each scout was able to ask at least one question during the nearly 10 minute contact window. During the whole program audience members were able to watch a real time satellite track of the ISS on a large video monitor beside the stage.

The program was introduced by astronaut Dan Tani, KD5DXE, himself having recently returned from four months aboard the ISS. On hand to locally MC the event was Dave Taylor, W8AAS. At the controls of the sound system and the telebridge interface was Bob Curran, KE3GG. The coordinator of the Boy Scout participation in the program was Bob Davidson, KB3KOW.

Located a short distance left of the stage where the ARISS contact was taking place, AMSAT had a large display table showcasing amateur radio and amateur radio satellites. In addition to fielding questions about amateur radio and explaining the various satellite samples on their table, they also had an example of the amateur radio antennas installed on the ISS and were running a video explaining the ARISS program on a large video monitor.

[ANS thanks Jim Cross, WI3N; Dave Taylor, W8AAS; and Bob Curran, KE3GG for the above information]

/EX

SB SAT @ AMSAT $ANS-143.06
AMSAT-DL Symposium and AGM

AMSAT News Service Bulletin 143.06
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.06

The SouthGate ARC web site carried a summary of the The 2010 Symposium and AGM of AMSAT-DL that took place on April 24 in the Amateur Radio facility at Bochum with its spectacular 20 metre dish.

The Symposium was told that a successor to the COMPASS-1 CubeSat will be built. COMPASS-2 will be a triple CubeSat, 100x100x340 mm, weighing 4 kg.

Mario Lorenz, DL5MLO gave a presentation on the telemetry and command operations of the new IHU-3 computer for P3-E. This included a live demonstration of the operation of the IHU-3 and the IPS operating system and showed the robustness of the turbo codes.

Peter G&#65533;lzow DB2OS reported that the 20m dish at Bochum has been opera-
ting successfully in automatic mode for over a year allowing continuous reception of the NASA solar probes Stereo-A and-B. Bochum supplies the received data to the NOAA in the United States.

Achim Vollhardt DH2VA reported in detail to the symposium on the joint feasibility study by AMSAT-DL and DLR (German Aerospace Center) on Lunar and Mars missions.

AMSAT-DL 2010 Symposium and AGM Report
http://tinyurl.com/33rcasl

AMSAT-DL in Google English
http://tinyurl.com/Amsat-DL

[ANS thanks the SouthGate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-143.07
NASA Listens One More Time for Phoenix

AMSAT News Service Bulletin 143.07
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.07

by Staff Writers (Mars Daily http://tinyurl.com/23hwyuj)
Pasadena, Calif. (UPI) May 17, 2010

NASA officials say they are conducting the fourth and final series of checks this week to determine whether the Phoenix Mars Lander has resumed operations.

NASA says its Mars Odyssey orbiter will listen for a signal from Phoenix during 61 flights over the lander's site on northern Mars. The orbiter detected no transmission from the lander during earlier campaigns totaling 150 overflights in January, February and April.

In 2008, Phoenix completed its three-month mission studying martian ice, soil and atmosphere. It continued work for an additional two months before reduced sunlight caused energy to become insufficient to keep it functioning. The solar-powered robot was not designed to survive the dark and cold conditions of a martian arctic winter, NASA said, but in case it did, scientists are using Odyssey to listen for the signals Phoenix would transmit if abundant spring sunshine revived the lander.

"To be thorough, we decided to conduct this final session around the time of the summer solstice, during the best thermal and power conditions for Phoenix," said Chad Edwards, chief telecommunications engineer for the Mars Exploration Program at NASA's Jet Propulsion Laboratory in Pasadena, Calif.

[ANS thanks Mars Daily for the above information]

SB SAT @ AMSAT $ANS-143.08
ARISS Status - 17 May 2010

AMSAT News Service Bulletin 143.08
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.08

1. Upcoming School Contacts

The Wireless Institute of Australia (WIA) in Bayswater, Victoria, Australia has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, May 29 at 10:43 UTC via ON4ISS in Belgium. The WIA will hold a special dinner to celebrate its centenary and has invited students from local schools in Canberra to make an ARISS school contact on that evening. It is anticipated that this dinner will be a high key event with Australia wide coverage.

2. Successful ARISS Contact Held with Komoro Higashi Junior High

On Friday, May 14, Komoro Higashi Junior High School students in Komoro, Nagano, Japan contacted onboard astronaut Soichi Noguchi, KD5TVP via the Amateur Radio on the International Space Station (ARISS) program. Prior to the event, children visited Nobeyama Radio Observatory and worked on radio kits as part of their science curriculum. Over 140 students, parents and guests watched as 15 students

had their questions answered during the contact, while 2 television stations and 5 newspapers provided media coverage.

3. MAI-75 Experiment Activated

The MAI-75 (Moscow Aviation Institute) experiment was activated on Friday, May 14. The ISS crew transmitted several SSTV (Slow Scan Television) images which were received by ground stations in Europe, Asia, Africa and South America. Images have been posted to the SSTV Web site: http://www.amsat.org/amsat/ariss/SSTV/

4. ARISS at Dayton Hamvention

Dayton Hamvention 2010 was held at the Hara Arena Complex in Dayton, Ohio over the May 14-16 weekend. The American Radio Relay League (ARRL) and the Radio Amateur Satellite Corporation (AMSAT) manned exhibition booths at the event. Gould Smith, WA4SXM, AMSAT Project Manager for ARISSat-1, gave a presentation on the satellite. The ARISSat-1 prototype was on exhibit and demonstrated to the crowds. ARRL held a Teachers Workshop and distributed ARISS bookmarks to educators interested in the ARISS program. The Dayton Hamvention is an internationally attended amateur radio convention that draws crowds of 25,000 annually.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

## 41. WSR-142 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-05-24 15:10:17 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000501cafb53$2b989e00$82c9da00$@net>
Source record: 594
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-142.S1
WSR 142 Part 1 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S1
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05222010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S2
WSR 142 Part 2 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S2
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
FM Repeater TWO

Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]

=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S3
WSR 142 Part 3 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S3
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S4
WSR 142 Part 4 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S4
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 42. SatPC32

Newsgroup: rec.radio.amateur.space
Date: 2010-05-29 12:35:58 UTC
From: Richard Ferryman <richardferryman@btinternet.com>
Message-ID: <6_ednb6-f_izl5zRnZ2dnUVZ7q-dnZ2d@bt.com>
Source record: 595

I want to somehow disable the PTT on my TX from SatPC32 when the satellite is below the horizon. This is very pertinent to running APRS through ISS. At present I have to be stop my APRS program and restart it manually at the correct times and I keep missing passes. I suspect I would need to use DDE to link to some sort of port control program or maybe via rotor control but am not experienced in using DDE.

Is there any SatPC32 guru who can make some suggestions?

Thanks from Dick G4BBH

## 43. Re: SatPC32

Newsgroup: rec.radio.amateur.space
Date: 2010-05-29 13:19:48 UTC
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Message-ID: <fr4206t5odop1ekg23kc1ivn8u3j4r663t@4ax.com>
Source record: 596

Interesting question. Is it possible to resolve the problem through
the APRS client? For instance, can you tweak the beaconing
parameters? If you set the beaconing parameters long enough, you will
cause minimal QRM yet get the pass stations.

--
Alan
WA4SCA

## 44. Re: SatPC32

Newsgroup: rec.radio.amateur.space
Date: 2010-05-29 17:29:15 UTC
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Message-ID: <iri206dcbv00a22h263men73glti34ue4c@4ax.com>
Source record: 597

After some thought, I think that perhaps WISP may be what you want:

http://www.amsat.org/amsat/ftpsoft.html#win-wisp

It was originally written for the pacsats, but it has the ability to run any program before a pass, track the pass, and then close it after a pass. You can do this even if you select the satellite as an analogue type. The SATPC32 DDE program will interface with it, so you should be able to schedule your APRS client, run the pass with antenna pointing, and then close the APRS client until the next pass. I used it for years with some extra programs back in the pacsat days.

WISP is old software, but is reported to run on XP-WIN7 32 bit versions. Not 64 bits however. There is/was provision for registering the program, but unless you are using it for pacsats, that is not a factor. Finally, the documentation is adequate, but can cause some head scratching. Some of the needed parameters are not always in the intuitively obvious locations.

I am nearly positive this will do what you want, but it may take a bit of tinkering to put all the pieces together. If you are not already subscribed, I would suggest the AMSAT-BB mailing list:

http://www.amsat.org/amsat-new/tools/maillist/maillist.php

There are a lot of folks there with expertise going back decades.

--
Alan
WA4SCA

## 45. ANS=150 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-05-30 14:46:58 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001301cb0006$e995bf20$bcc13d60$@net>
Source record: 598
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-150

ANS is a free, weekly, news and information service of
AMSAT North America, The Radio Amateur Satellite Corporation.
ANS reports on the activities of a worldwide group of Amateur
Radio operators who share an active interest in designing,
building, launching and communicating through analog and
digital Amateur Radio satellites.

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**********************************************************************
* NOTICE *
* It is time to submit nominations for the upcoming open seats on *
* the AMSAT--NA Board of Directors. A nomination requires either *
* one Member Society or five current individual members to nominate *
* an AMSAT member for the position. Three director's terms expire *
* this year: Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith, *
* WA4SXM. Nominations must be in writing and mailed to: AMSAT, *
* 850 Sligo Ave #600, Silver Spring MD 20910. They can arrive no *
* later than June 15th. *
**********************************************************************
```

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* AMSAT Announces 2010 Space Symposium Will Be Near Chicago
* ARISSat-1 Latest Status
* Thirteen Original Colonies Satellite Operators Wanted
* Museum Ships Weekend Special Event Station KK5W June 5, 2010
* Satellite Shorts From All Over
* Launch of Mars500 mission
* 2010 AMSAT Annual Meeting and Space Symposium - First Call for papers
* ARISS Status - 24 May 2010

SB SAT @ AMSAT $ANS-150.01
AMSAT Announces 2010 Space Symposium Will Be Near Chicago

AMSAT News Service Bulletin 150.01
>From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.01

MSAT Announces 2010 Space Symposium Will Be Near Chicago

AMSAT announces the 2010 AMSAT Space Symposium and Annual Meeting
will be held on Friday, October 8 through Sunday, October 10. This
year we have selected the Chicago/Elk Grove Holiday Inn which is
near O'Hare Airport for the event. This is the same hotel that
recently has hosted the Central States VHF Conference, Digital
Communications Conference and NIDXCC events.

All Amateur Radio Operators interested in space communications are
invited to participate in the Symposium offerings including:

+ Space Symposium with Amateur Satellite Presentations

+ Operating Techniques, News, & Plans from the Amateur Satellite World

+ Board of Directors Meeting open to AMSAT members

+ Meet Board Members and Officers

+ Annual General Membership Meeting

+ Annual Banquet-Keynote Speaker and Door Prizes

+ President's Club Reception

+ Area Coordinator's Breakfast

The Chicago/Elk Grove Holiday Inn is located at 1000 Busse Road,
Elk Grove, IL (near O'Hare Airport with free hourly shuttles).
The room rate and reservation information will be announced shortly.

Watch http://www.amsat.org/amsat-new/symposium/2010/index.php
for more news as it becomes available.

[ANS thanks AMSAT's 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-150.02
ARISSat-1 Latest Status

AMSAT News Service Bulletin 150.02
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.02

ARISSat-1 prototype and flight units underwent Thermal/Vacuum testing
in Orlando during the last week. Prototype ground station software for
telemetry collection was tested from a remote site. Additional flight
unit Thermal/Vacuum testing, Vibration testing and a Phase 3 Safety
Review are the next major milestones before shipment to Russia
in early July.

[ANS Thanks Gould, WA4SXM, for this latest information]

/EX

SB SAT @ AMSAT $ANS-150.03
Thirteen Original Colonies Satellite Operators Wanted

AMSAT News Service Bulletin 150.03
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.03

Thirteen Original Colonies Satellite Operators Wanted

Dave, KB1PVH is heading up organizing a team of satellite operators from each of the original colonies for the 13 Colonies special event on July 4.

Dave is looking for is one operator from each of the 13 original colonies, NY-NJ-RI-GA-PA-NH-SC-VA-CT-DE-MD-NC, Dave, KB1PVH will be MA. There is no pressure to work all passes, just do what you can and have fun.

Anyone interested in participating is invited to contact Dave via e-mail at kb1pvh@gmail.com. Additional information on the Special Event can be found at: http://www.13Colonies.info/

[ANS thanks Dave, KB1PVH for above information]

/EX

SB SAT @ AMSAT $ANS-150.04
Museum Ships Weekend Special Event Station KK5W June 5, 2010

AMSAT News Service Bulletin 150.04
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.04

Museum Ships Weekend Special Event Station KK5W June 5, 2010

The Brazos Valley Amateur Radio Club (BVARC) will be participating in the Museum Ships Weekend event on June 5-6, 2010 from Pelican Island (IOTA NA-143) near Galveston, Texas. BVARC plans a full 2-day operation and will very likely be the only group in Museum Ships Weekend working OSCAR satellites.

It is expected that amateur radio operators will activate amateur radio stations on over 70 ships worldwide during the event. The BVARC operation from Seawolf Park will activate both the submarine USS Cavalla and the destroyer escort USS Stewart.

The planned operation on OSCAR satellites will take place on Saturday, June 5, 2010 on the 1550 UTC and 1731 UTC passes of SO-50, and on the 1931 UTC pass of AO-27. The call sign will be the BVARC club station KK5W. QSL with SASE to KK5W, Brazos Valley Amateur Radio Club, PO BOX 2997, Sugar Land, TX 77487-2997.

The Museum Ships Team has more information on their website:
http://www.nj2bb.org/museum/index.html

Details of the Brazos Valley Amateur Radio Club operation are posted
at: http://www.bvarc.org/index.php?page&#65533;

[ANS thanks Allen Mattis, N5AFV for the above information]

/EX

SB SAT @ AMSAT $ANS-150.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 150.05
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.05

+ Toyoshige Kamei JA3SGR has requested reception reports from southern hemisphere stations of the 437.305 MHz beacon on the Amateur Radio satellite Negai launched May 21. Negai was built by students at the Soka University in Tokyo and is in a low inclination 30 degree orbit. Reports should be sent to the Soka University kuroki Laboratory via e-mail: kurokilab.sokags@gmail.com

Beacon Frequency 437.305 MHz
Beacon is CW or FM (AFSK-FM AX25 Protocol)
TX power 0.1W CW and 0.4W on FM Packet.

Negai website In Google English including 2 Line Orbital Elements
http://tinyurl.com/Negai

+ Bobby Lacey, KF4GTA was selected to be a part of the NASA STS-132 Tweetup on May 14. He has posted his video of the Atlantis final scheduled launch to the ISS at: http://bit.ly/cPnA6o.

+ A YouTube video shows the mechanism for deploying four solar panels on a 2U CubeSat by using an electric motor:
http://tinyurl.com/3xzs7oo (via SouthGate ARC)

+ Watch Keith Pugh W5IU, and Alan Biddle WA4SCA demonstrate satellite operation on HO-68 at the Dayton Hamvention. The YouTube videos can be viewed on the SouthGate site at: http://tinyurl.com/39zhje8.

+ Check out the amazing photo from ESA's Herschel Multi-tiered Extra-galactic Survey (HerMES) Key Project, which studies the evolution of galaxies in the distant, ancient Universe. Each of the dots on this photo is a galaxy: http://tinyurl.com/2vf92b2 (UniverseToday.com)

+ John, N4QQ is in PJ2 (Curacao) for an HF contest this weekend, and has his Arrow, and the AMSAT DXpedition loaner D7 with him. He plans on being active on the FM satellites Thursday, Friday, and the following Monday and Tuesday. No activity is expected over the weekend. John is an experienced satellite operator, but new to the FM satel-

lites, so please give him a little room to put a somewhat rare DXCC entity on the air. Members of other DXpeditions interested in adding satellite operations to their events should contact Drew via e-mail at ko4ma@amsat.org for information on AMSAT's loaner gear.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-150.06
Launch of Mars500 mission

AMSAT News Service Bulletin 150.06
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.06

On June 3rd, 2010, the Launch of Mars500 mission will begin in Moscow.

The first full-duration simulation of a human mission to Mars is about to begin. After closing the hatch, the crew of six will remain in their 'spacecraft' for 520 days.

The 520-day simulated mission to Mars will start on 3 June, when the isolation facility is sealed and the international crew start their record-breaking experiment.

The crew will basically live and work like astronauts on the International Space Station, with maintenance work, scientific experiments and daily exercise. They will follow a seven-day week, with two days off, except when special and emergency situations are simulated.

Ed. Note: Now here is an example of plenty of free time for the Astronauts. A 2.4ghz Txmitter and a 1.2ghz RXcvr would go great to occupy their time. Maybe Even a spacewalk to put up 2 umbrella type antennas to communicate back to Earth. (They could use some short whips or small beams on 2 and 435 for the Earth Bound simulation even talking through AO-51)

There are six crewmembers plus a Russian backup: ESA-selected Diego Urbina(Italian/Colombian, age 27) and Romain Charles (French, 31); Sukhrob Kamolov (32), Alexey Sitev (38), Alexandr Smoleevskiy (33) and Mikhail Sinelnikov (37) from Russia; and Wang Yue (26) from China.

Housed in Russia's Institute of Biomedical Problems (IBMP) in Moscow, the 550 m² sealed space mockup includes an interplanetary spaceship, a Mars lander and a martian landscape.

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-150.07
2010 AMSAT Annual Meeting and Space Symposium - First Call for papers

AMSAT News Service Bulletin 150.07
>From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.07

2010 AMSAT Space Symposium and Annual Meeting - First Call for papers

This is the first call for papers for the 2010 AMSAT Space Symposium and Annual Meeting to be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net.

[ANS thanks AMSAT's 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-150.08
ARISS Status - 24 May 2010

AMSAT News Service Bulletin 150.08
From AMSAT HQ SILVER SPRING, MD.
May 24, 2010
To All RADIO AMATEURS
BID: $ANS-150.08

1. School Contacts

The Wireless Institute of Australia (WIA) in Bayswater, Victoria, Australia was scheduled for an Amateur Radio contact with the International Space Station (ARISS) on Saturday, May 29 at 10:43 UTC via ON4ISS in Belgium. The WIA will held a special dinner to celebrate its centenary and has invited students from local schools in Canberra to make an ARISS school contact on that evening. It is anticipated that this dinner will be a high key event with Australia wide coverage.

Istituto Comprensivo Camaiore - Scuola Secondaria 1° Grado "M. Rosi," Camaiore, Italy has been scheduled for an Amateur Radio on the

International Space Station (ARISS) contact on Saturday, June 5 at 10:21 UTC. Students participating in the contact have learned about space science, principles of radio communications and the benefits of space exploration and have prepared to use English in a real life situation.

2. ARISS Contact for Pita Kallak School

An Amateur Radio on the International Space Station (ARISS) contact was held between Pita Kallak School in Kuujjuaq, Quebec, Canada and on-orbit astronaut Timothy Creamer, KC5WKI on Thursday, May 20. Telebridge station ON4ISS in Belgium provided the connection. Some technical difficulties were encountered, but nine questions were answered during the session. In preparation for the contact, students learned about the ISS and amateur radio through video, the internet and guest speakers and created science related projects in the classroom.

3. ARISSat Presentation Available for Viewing

Gould Smith, WA4SXM gave a presentation on ARISSat-1 at the Dayton Hamvention, held over the May 14-16 weekend. His presentation has been posted to YouTube.
See: http://www.youtube.com/watch?v=DfSCw6VcU

4. ARRL QST Covers ARISS

The American Radio Relay League (ARRL) June QST carried an article by Steve Ford, WB8IMY titled, "Ground Control to Major Tom." The story was about ARISS and making general contacts with the ISS crew members. It started off with how ARISS is mainly to enhance youth STEM (Science, Technology, Engineering and Math) education, but that all amateur radio operators can have an ARISS contact. It talked about the types of contacts and included a picture of astronaut Mike Fincke. Then it talked about Richard Garriott and his SSTV (Slow Scan Television). The ARRL monthly journal has a circulation of 150,000.

5. Astronaut Training Status

Astronaut Don Pettit, KD5MDT had a productive ham radio training session review on May 19. He expects to be active with the amateur radio system while on the ISS and is currently assigned to Expedition 30.

6. ARISS Presented at Scout-O-Rama

"Scout-O-Rama" was held over the May 15 weekend in Wheaton, Illinois. ARISS Mentor John Spasojevich set up an exhibit about amateur radio and ARISS at this event.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 46. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-06-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1275372001@panix.com>
Source record: 599
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 47. ANS-157 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-06-06 01:18:50 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701cb0516$32061570$96124050$@net>
Source record: 600
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-157

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

**********
* NOTICE: BoD Nominations Due June 15 *
* It is time to submit nominations for the upcoming open seats on *
* the AMSAT-NA Board of Directors. A nomination requires either *
* one Member Society or five current individual members to nominate *
* an AMSAT member for the position. Three director's terms expire *
* this year: Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith, *
* WA4SXM. Nominations must be in writing and mailed to: AMSAT, *
* 850 Sligo Ave #600, Silver Spring MD 20910. They can arrive no *
* later than June 15th. *
**********

In this edition:

* AMSAT-NA 2010 Symposium Announcement
* China President Hu Jintao Visits HO-68 Operation
* AO-51 Operations Team Says New Power Control Settings
* AMSAT-OH Reports P3E S/X Band Transponder Prototype Operational
* Canberran Students Enjoy ARISS Ham Radio Contact
* AMSAT-India Announces Re-Organization
* AMSAT Awards
* New Items at the AMSAT Online Store
* AO-51 Operations Team Announces Field Day Schedule

SB SAT @ AMSAT $ANS-157.01
AMSAT-NA 2010 Symposium Announcement

AMSAT News Service Bulletin 157.01
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.01

AMSAT announces the 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event. This is the same hotel that recently has hosted the Central States VHF Conference, Digital Communications Conference and NIDXCC events.

All Amateur Radio Operators interested in space communications are invited to participate in the Symposium offerings including:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes
+ President's Club Reception
+ Area Coordinator's Breakfast

The Chicago/Elk Grove Holiday Inn is located at 1000 Busse Road, Elk Grove, IL (near O'Hare Airport with free hourly shuttles). The room rate and reservation information will be announced shortly.

Also with the 2010 Symposium Announcement please keep in mind the Call For Papers:

This is the first call for papers for the 2010 AMSAT Space Symposium and Annual Meeting. The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings
+ Symposium Presentations
+ Poster Presentations
+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net. Dan Schultz, N8FGV will assist as Co-Editor of the Proceedings.

Watch http://www.amsat.org/amsat-new/symposium/2010/index.php for more news as it becomes available.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-157.02
China President Hu Jintao Visits HO-68 Operation

AMSAT News Service Bulletin 157.02
>From AMSAT HQ SILVER SPRING, MD.

June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.02

Michael Chen, BD5RV/1 reported that on May 31 he, along with BA1DU, BG1TTA, BA1EO, BG1HOB accompanied Chinese President Hu Jintao as he visited the amateur satellite station set up in the China Science and Technology Museum in Beijing. Several children was operating HO68 while the president was watching. Michael reported, "He encouraged them for further activities and confirmed the positive effects of amateur satellites."

AMSAT-China Web Page: http://www.camsat.cn

[ANS thanks Michael Chen, BD5RV/1 for the above information]

/EX

SB SAT @ AMSAT $ANS-157.03
AO-51 Operations Team Says New Power Control Settings

AMSAT News Service Bulletin 157.03
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.03

AMSAT-NA VP Operations, Drew KO4MA reported on the current status of AO-51. The satellite is currently operational with the main V/U repeater, 67 Hz PL enabled.

June 1 - June 21 FM Repeater, V/U
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

The power management routine adjusts the power output in three stages based on illumination state and battery voltage. The high setting is 1.57 watts. The mid-setting is at 290 mw, and the low setting is off.

During passes over the eastern US, especially in the morning, the Operations Team has been collecting telemetry on the 435.150 transmitter, so users may have heard the power levels toggle on 435.300. The rest of the time outside of eclipse it should be pretty steadily at the high setting. Soon after entering eclipse, if in use, the transmitter will shut off. Please do not use AO-51 when it is in eclipse.

Eclipses continue to lengthen until about July 1, then drop back to zero by the third week of August. This last period of continuous illumination will last until January 2011. AO-51 will likely only be operational while illuminated after this date.

Drew thanks Mark Hammond N8MH, Kevin Schuchmann WA6FWF, and Jim White WD0E for their help with the satellite during this period of rearranging our operational plan, and learning new tricks to keep AO-51

available as much as possible. We are approaching 6 years in orbit!

[ANS thanks AMSAT-NA VP Operations, Drew KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-157.04
AMSAT-OH Reports P3E S/X Band Transponder Prototype Operational

AMSAT News Service Bulletin 157.04
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.04

Michael, OH2AUE has written the latest news of the AMSAT-OH S/X band coherent/linear transponder for P3E project. The Coherent mode is a fully functional testbed for the P5A ranging transponder.

The Finnish team meets on a regular basis every 4 - 6 weeks for testing and to followup on the work of each individual. The team has assembled the linear transponder prototype and verified it with over-the-air tests and laboratory tests. Flight versions of the submodules are being produced at this time with the goal of integrating them and cabling the S/X transponder.

Full verification of the Coherent Mode is awaiting a fully functional command station AND a functional IHU + CAN environment. Preliminary testing and evaluation of the Coherent Processor have shown proper operation of the design and circuitry (e.g. locking onto a "modulated" uplink carrier, tracking this etc.).

The general design, block diagrams, and photos can be found on-line at: http://www.rats.fi/rats/amsat-oh/ It is currently in Finnish but the team hopes you will enjoy it.

This transponder is especially complex as you can see from these key on figures on the web page:

* 9 different local oscillators
* All local oscillators locked to the common 10 MHz USO
* 21 different frequency mixers
* 13 different intermediate frequencies
* Linear Mode output power on 10 GHz: 3 W PEP
* P5A Mode output power on 10 GHz: 1 mW PEP
* 38 control lines on the CAN interfaces
* 2 CAN interfaces, one in multiplexed mode
* 4 dedicated direct control lines interfacing with the IHU
* 14 analogue telemetry lines to the CAN bus
* Coherent Mode Uplink/Downlink ratio is fixed at 30:7

Michael concludes, "Our team sincerely hopes funding will eventually be found for P3E/P5A - this is the only thing that keeps us motivated to continue our work. On the other hand we are clearly behind schedule, so

the delays are welcome. But then again, any news of progress would boost our production rate phenomenally!"

[ANS thanks Michael, OH2AUE for the above information]

/EX

SB SAT @ AMSAT $ANS-157.05
Canberran Students Enjoy ARISS Ham Radio Contact

AMSAT News Service Bulletin 157.05
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.05

A very successful Amateur Radio on the International Space Station (ARISS) was completed this week. Jim Linton, VK3PC provided this information to the SouthGate ARC News site; the story is reprinted below:

Ten students from the Trinity Christian School at Wanniassa in the Australian Capital Territory made history at the weekend with the first Amateur Radio on the International Space Station (ARISS) program contact to be held in Canberra.

The event was part of the Wireless Institute of Australia (WIA) centenary dinner attended by 200 people including international guests, Australian Communications and Media Authority Chairman Chris Chapman, and WIA Centenary Patron Dick Smith VK2DIK.

A telebridge ON4ISS in Belgium (operator Philippe Van houte, ON5PV) made the contact with ARISS Asia-Pacific Coordinator, Tony Hutchison VK5ZAI at the controls in Canberra for the contact on Saturday, 29 May.

The audience remained quiet and listened intently as the Year 12 students asked Astronaut and Flight Engineer Tracy Caldwell-Dyson KF5DBF, on her assignment on the space station, a series of questions.

The session began with a brief speech by Tracy who congratulated the WIA on its centenary and commented briefly on amateur radio's history and amateur satellites.

Student William Shaw, asked: When you are in space, are you "above" the law? If there was a legal issue that arose on the space station which nation's law would apply?

Tracy replied that she did not foresee that there would be a legal problem on the space station and added that there were controls on what could occur in space.

Another student, Elizabeth Shen, asked about living is space with zero gravity, its effects on the body and whether there were changes to the normal blood pressure and pulse rate.

It was learnt in Tracy's response that the crew are constantly monitored, there are effects and rehabilitation on return to earth can take up to three months.

In other questions the topics of sleeping in an environment with 16 sunrises and sunsets a day, space walking - Tracy is to have that experience soon - and the potential for collision with solid matter in space.

After the ARISS contact Elizabeth Shen and William Shaw said they were both extremely impressed by the efforts made by astronauts to qualify and fly in space, giving them encouragement to strive in their chosen careers.

Elizabeth, aged 17 added: 'The opportunity to speak to someone above the space station was one of the best experiences in her life.'

While William, aged 18, said 'It was really cool to be able to talk to someone who is in a completely different situation - with the zero gravity and what not.'

Trinity Christian School Principal, Carl Palmer VK2TP/VK1TP was justifiably very proud of his students.

WIA President Michael Owen VK3KI presented each with a participation certificate. WIA Centenary Patron Dick Smith VK2DIK - aviator, adventurer and entrepreneur - shook their hands, spoke to them about their experience and had his photograph taken with them.

Originally posted at: SouthGateARC http://tinyurl.com/22lxg2d

Wireless Institute of Australia posting, including contact audio: http://tinyurl.com/2dubf7a

[ANS thanks Jim Linton, VK3PC; Richard Brunton, G4TUT; and the Southgate ARC for the above information]

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SB SAT @ AMSAT $ANS-157.06
AMSAT-India Announces Re-Organization

AMSAT News Service Bulletin 157.06
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.06

Nitin, VU3TYG, Secretary, AMSAT-India reported on a May 26 reorganization of the post of President and Vice-President for AMSAT-India Organization update for post of President and Vice President.

Current president Air Commodore Suby, VU2UV stepped down from the post citing health reasons. As a result, Ramesh, VU2RMS has taken the role of President, AMSAT-India.

Dr. Ved Prakash Sandlas, VU2VP was elected Vice-President, AMSAT-India.

AMSAT-India thanked Suby, VU2UV for his guidance to AMSAT-India during his tenure. Suby will continue to hold a seat on the core committee.

[ANS thanks Nitin, VU3TYG, Secretary, AMSAT-India for the above information]

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SB SAT @ AMSAT $ANS-157.07
AMSAT Awards

AMSAT News Service Bulletin 157.07
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.07

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for these Amateur Radio Operators:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

Brennan Price, N4QX
John Neeley, W6ZKH
Ed Empey, WA7ETH
Jennifer Melfi, KC2TMA

The following have earned the AMSAT Communications Achievement Award:

Larry Teran, KI6YAA, #512
John Neeley, W6KZH, #513
Gerry Krebs, N0JE, #514
Hugh Empey, W7ETH, #515

The following have earned the W4AMI Achievement Award for 1000 contacts:
Evangelos Kafetzopoulos, SV1EEK, endorsement from 3000 to 4000

The following have earned the W4AMI Achievement Award for 5000 contacts:
Evangelos Kafetzopoulos, SV1EEK, #23

The following have earned the South Africa AMSAT Communications Achievement Award

Larry Teran, KI6YAA, #US145
Gerry Krebs, N0JE, #US146
Hugh Empey, WA7ETH, #US147

To see all the awards visit http://www.amsat.org.

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-157.08
New Items at the AMSAT Online Store

AMSAT News Service Bulletin 157.08
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.08

Wearing his AMSAT On-line Store Manager hat, Bruce Paige, KK5DO
says he has added the following items to the AMSAT online store:

2010 Red Baseball Cap with AMSAT logo
2010 Gold ARISSat-1 Tee Shirt
2010 Tan AMSAT Golf Shirt
2010 Getting Started with Amateur Satellites
AMSAT - The First Forty Years
2010 Laminated Frequency Guide

If you are interested in any of the limited supply items, now is
the time to order. Visit the AMSAT Online Store at:
http://www.amsat-na.com/store/categories.php

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-157.09
AO-51 Operations Team Announces Field Day Schedule

AMSAT News Service Bulletin 157.09
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.09

It's that time of year again; summer and Field Day! Each year
the American Radio Relay League (ARRL) sponsors Field Day as an
emergency preparedness exercise. The event takes place during
a 24-hour period on the fourth weekend of June.

For 2010 the event takes place during a 27-hour period from 1800 UTC
on Saturday June 26, 2010 through 2100 UTC on Sunday June 27, 2010.
Those who set up prior to 1800 UTC on June 26 can operate only 24
hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own
version of Field Day for operation via the amateur satellites,
held concurrently with the ARRL event.

AMSAT Field Day Rules are available on-line at:
http://www.amsat.org/amsat-new/awards/amsatfd.php
This page also includes instructions on how to report your score.

AMSAT-NA VP Operations, Drew KO4MA says the AO-51 Command Team and
Operations Group has announced the AO-51 configuration for Field Day:

June 21 10:40Z - June 24 09:35Z FM Repeater, V/S to allow testing
of V/S station equipment prior to Field Day:
Uplink: 145.880 Mhz FM
Downlink: 2401.200 Mhz FM

June 24 09:35Z - June 27 06:40Z FM Repeater, V/U
Please observe the 1 QSO per repeater Field Day rule
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

June 27 06:40 - June 27 22:00Z FM Repeater, V/S
Please observe the 1 QSO per repeater Field Day rule
Uplink: 145.880 Mhz FM
Downlink: 2401.200 Mhz FM

June 27 22:00Z - July 5 FM Repeater, V/U
Post-Field Day Configuration
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

AO-51 Echo Mode Suggestion Email Address is: ao51-modes@amsat.org

The latest AO-51 Command Team and Operations Group News can be found
on-line at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the UNITEC-1 Team, AMSAT-DL, AMSAT-UK, and the SouthGate
site for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that,
please keep in mind this advice to a student pilot, "A thunderstorm is
never as bad on the inside as it appears on the outside. It's worse!
If you push the stick forward, the houses get bigger, if you pull the
stick back they get smaller. Try to keep the number of your landings
equal to the number of your takeoffs."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

## 48. Radio Meteor Obs. Bull. May 2010 eta Aquarids

Newsgroup: rec.radio.amateur.space
Date: 2010-06-07 18:21:52 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <h4eq065dkdabbdmp7l9fki785gre5h0jkv@4ax.com>
Source record: 351
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 202 of May 2010 (92 K) is available now as

http://www.rmob.org/rmobtext/rmob1005.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

Chris

## 49. ANS-164 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-06-13 01:43:04 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001301cb0a99$bdf95820$39ec0860$@net>
Source record: 352
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-164

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

**********
* FINAL NOTICE: BoD Nominations Due June 15 *
* It is time to submit nominations for the upcoming open seats on *
* the AMSAT-NA Board of Directors. A nomination requires either *
* one Member Society or five current individual members to nominate *
* an AMSAT member for the position. Three director's terms expire *
* this year: Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith, *
* WA4SXM. Nominations must be in writing and mailed to: AMSAT, *
* 850 Sligo Ave #600, Silver Spring MD 20910. They can arrive no *
* later than June 15th. *
**********

In this edition:

* Thank You! We've Met The Dayton $5000 Challenge
* 2010 AMSAT Space Symposium Room Reservation Code
* AMSAT Forum at Dayton Hamvention Videos Ready to be Viewed On-line
* Museum Ships Weekend 2010 - Special Event on the Satellites
* A Summer List of Seminars and Symposiums
* Early Colloquium Pictures Sought
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-164.01
Thank You! We've Met The Dayton $5000 Challenge

AMSAT News Service Bulletin 164.01
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.01

Thanks to the generosity expressed by AMSAT members and others, we have met the "Dayton Challenge" one-for-one matching gift goal of $5,000.00. This goal was achieved in less than two months. AMSAT

thanks the Dayton Amateur Radio Association (DARA) for their continued support of AMSAT. These donations will help support "Getting AMSAT Back into Space."

DARA President Steve Coy, K8UD wrote to AMSAT President Barry Baines, WD4ASW, "I am glad that this promotion has worked well and I am looking forward to other endeavors in the future. AMSAT has been a major attraction to Hamvention for many years, and hopefully for many years to come. I hope other organizations will step up with similar programs. Launches have not been going down in price, however with the recent launch of Falcon 9, perhaps there may be other opportunities in the future. We all need to continuously look outside the box for new solutions. Again, DARA congratulates all the AMSAT members and best wishes for the new satellite."

While this one-for-one matching opportunity has been met, AMSAT continues on it's capital drive to raise $100,000.00 in both 2010 and 2011. One AMSAT member has just agreed to pledge $500.00 to AMSAT as an additional 'one-for-one' matching opportunity, so donations made now will continue to "grow".

Since announcement of the campaign in October 2009, over $25,087.00 has been raised to date, not including the DARA matching gift. If you haven't donated to AMSAT this year, please consider making a donation as we must continue to raise funds in 2010 to underwrite the construction and launch of our next satellite, Fox. We will continue to provide opportunities for 'small donations' at various hamfests as well as making contributions online: http://www.amsat-na.com/store/donation.php

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-164.02
2010 AMSAT Space Symposium Room Reservation Code

AMSAT News Service Bulletin 164.02
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.02

The 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

The 2010 Symposium Committee has completed the room reservation and registration details for the event. The Hotel booking code for the Elk Grove Village Holiday Inn is AMS for the AMSAT convention. The $79 per-night room rate will apply for those using this group code.

The direct web page link to the Elk Grove Village Holiday Inn is
http://tinyurl.com/22s788d

For people needing special accommodations please call the Hotel
directly at (847) 437-6010, ask for Brad.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-164.03
AMSAT Forum at Dayton Hamvention Videos Ready to be Viewed On-line

AMSAT News Service Bulletin 164.03
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.03

If you weren't able to attend the Dayton Hamvention this year, you
missed five interesting and informative presentations at the AMSAT
Forum. The complete presentations are now available on the AMSAT
website at http://www.amsat.org. From the menu on the left side of
the home page, select "AMSAT Video News".

The direct link to the AMSAT Video News Page is:
http://www.amsat.org/amsat-new/information/videoNews.php

Here's what you'll find:

Barry Baines, WD4ASW, AMSAT President, "AMSAT Status Report"
AMSAT President Barry Baines highlights current activities within
AMSAT and discusses some of the challenges facing the organization.

Drew Glasbrenner, KO4MA, AMSAT VP Operations, "AMSAT Satellite Oper-
ations and International Satellite Operations". Drew discussed oper-
ational AMSAT satellites and described new and future international
Satellites.

Mike Forsythe, AC2V, "Integrating Satellite Operations into DXpeditions"
Mike, K4T Team Leader described the planning and execution of the K4T
DXpedition, and how to have satellite operations be a major part of
DXpeditions, involving youth and making it all work on green power!

Gould Smith, WA4SXM, AMSAT VP User Services, "Getting ARISSat-1 Ready
to Fly". Gould is the AMSAT Project Manager for ARISSat-1 and talked
about the evolution of SuitSat-2 to ARRISat-1, the current status of
the satellite project, and the testing and delivery of two satellites
to Russia in July.

Roger Westgate, WC2R, "NextGen CubeSat Program Update".
Roger delivered the update prepared by Alex Harvilchuck, N3NP, a
Systems Engineer with IBM and the NextGen CubeSat Program Manager.
A team of engineering students from the State University of New
York (SUNY) at Binghamton have been modifying the power systems

from ARISSat-1 for use in a 3U CubeSat with a U/V linear transponder, for AMSAT.

The files are in Windows Media Video (.wmv) format and will work with Internet Explorer and Windows Media Player on a PC, Safari and QuickTime (with .wmv plug-in) under OS X on an Apple Macintosh, and with a .wmv player under Linux or other operating system.

Credits:
Video and audio recording: Patrick Stoddard WD9EWK and
Douglas Quagliana KA2UPW
Moderator: Alan Biddle WA4SCA
Video server: Rob Meisse W8REM and Gunther Meisse W8GSM
Webmaster: Rick Hambly W2GPS
Video editor: Steve Belter N9IP

[ANS thanks Steve Belter, N9IP for the above information]

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SB SAT @ AMSAT $ANS-164.04
Museum Ships Weekend 2010 - Special Event on the Satellites

AMSAT News Service Bulletin 164.04
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.04

The Brazos Valley Amateur Radio Club (BVARC) wishes to thank all the amateur radio operators who worked special event station KK5W operating from Seawolf Park in Galveston, Texas during the Museum Ships Weekend event June 5-6, 2010.

Two passes of SO-50 and one pass of AO-27 were worked by KK5W on June 5, 2010, and a total of 26 satellite contacts were made with stations in 17 US states and Ontario. Contacts were made with K8YSE at the Hudsonville Michigan hamfest, WD9EWK at the Show Low Arizona hamfest, and N2SPI at the Rochester New York hamfest. It was nice to be able support these stations conducting satellite demonstrations, and to let those listening at the hamfests know that special event stations operate on the satellites.

A contact with Patrick, WD9EWK, also provided the opportunity to talk with a boy scout about the Museum Ships Weekend Event, and the scout was able to satisfy several requirements toward the Radio Merit Badge.

Two club stations that were demonstrating amateur radio to the public, W9MJL operated by the Vermilion County Amateur Radio Association in Illinois and VE3JW at the Canada Science & Technology Museum in Ottawa, were also worked. The stations operating at the various hamfests and special events took turns working stations which allowed many contacts to be made on the congested passes.

A schedule was set up for KK5W to try for a ship-to-ship satellite contact with the USS Wisconsin Radio Club - N4WIS in Virginia Beach, Virginia, but due to the heavy congestion on the passes we were unable to make the contact. It was nice, however, to have another ship operating on the satellites for Museum Ship Weekend and we hope that satellite operators living near some of the museum ships that participate in the event will come forward and volunteer to help to put other ships on the satellites next year.

[ANS thanks Allen Mattis, N5AFV for the above information]

/EX

SB SAT @ AMSAT $ANS-164.05
A Summer List of Seminars and Symposiums

AMSAT News Service Bulletin 164.05
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.05

See the list below for Educational and Symposium Opportunities:

---

2010 AMSAT Space Symposium Call For Papers:

This is the first call for papers for the 2010 AMSAT Space Symposium and Annual Meeting. The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings
+ Symposium Presentations
+ Poster Presentations
+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net. Dan Schultz, N8FGV will assist as Co-Editor of the Proceedings.

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Remember also the AMSAT-UK Colloquium 2010 which will be held at the Holiday Inn, Guildford, UK (same venue as in 2009) on Saturday July 31 to Sunday August 1. Details on-line at: http://www.uk.amsat.org/

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NASA Science News for June 7, 2010 says they have started sending complimentary DVDs of the smash-hit planetarium show "Journey to the Stars" to teachers and students around the country. The story

from Science@NASA reviews the show and tells educators how to request their copies: http://tinyurl.com/255leto

---

The IEEE is co-sponsoring with the Control Systems Society, American Automatic Control Council, International Federation of Automatic Control, University of Maryland, and University of Kansas. a Workshop targeted for Teachers and Students on Ideas and Technology of Control Systems.

>Date: June 29, 2010
Place: Baltimore Marriott Hotel

The workshop is for middle and high school teachers and students. It will be held in Baltimore at the Baltimore Marriott Hotel on Tuesday, June 29, 2010. This one-day workshop is organized in celebration of 10th Anniversary of the Control Outreach Program in conjunction with the 2010 American Control Conference (a pre-conference event): http://www.a2c2.org/conferences/acc2010/SpecialEd.html

Registration: Free.
Deadline: June 15, 2010
Send E-mail to: kumath@math.ku.edu

Lunch will be provided and a reception will follow immediately after the workshop.

The workshop activities include short presentations by control systems experts from the technical community, informal discussions, and the opportunity for teachers to meet passionate researchers and educators from academia and industry. The talks are designed to be educational, inspirational and entertaining showing the excitement of being an engineer but showing also that control systems is a field that spans science, technology, engineering and mathematics (STEM).

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The 44th annual CSVHFS Conference is July 22nd - 24th in St. Louis. The Online Registration form is up and running, as is the Hotel Reservation Form. All the details are on the CSVHFS Web Site. http://www.csvhfs.org/conference/index.html

---

Technical papers are solicited for presentation at the 29th Annual ARRL and TAPR Digital Communications Conference to be held September 24-26, 2010 in Portland, Oregon. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2010. Please send papers to:

Maty Weinberg
ARRL

225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org.

Papers will be published exactly as submitted and authors will retain
all rights.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-164.06
Early Colloquium Pictures Sought

AMSAT News Service Bulletin 164.06
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.06

This year sees the 25th AMSAT-UK International Space Colloquium and
Jim Heck G3WGM is looking for pictures of the early years.

The first event was held in Harrow School a quarter of a century ago,
it later moved to the University of Surrey and finally to the Holiday
Inn at Guildford. Jim is looking to have a display of early pictures
at this years event which takes place 31 July - 1 Aug.

If you have any pictures of the early years please email Jim at
g3wgm@amsat.org

The Colloquium is open to all Radio Amateurs and Shortwave listeners,
for further details see: http://www.uk.amsat.org/colloquium

Videos from 2008/9 can be seen at http://www.batc.tv/channel.php?ch=1

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-164.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 164.07
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.07

+ Congratulations to Don WB8ZOM on his first contact via satellite
on SO-50 on June 7. Don contacted John K8YSE. N3TL added encour-
agement, "Working the satellites is the most fun and satisfying
thing I've ever done in amateur radio." Bob W7LRD observed, "Be
aware this is an addictive part of ham radio - there is no cure!"

Greg KO6TH noted, "That bug bit me about 17 years ago. It still
hasn't let go."

+ The SpaceX Falcon 9 blasted-off successfully from Cape Canaveral at
1545 UT on Friday, June 4. Watch the Falcon 9 Launch 1 Webstream at:
http://tinyurl.com/26cjwuv

+ ESA's Italian astronaut Paolo Nespoli will visit the International
Space Station in November, and he needs your help to name his mission.
More information can be found at http://tinyurl.com/35wukjn

+ A video of the French Over The Horizon (OTH) radar, Nostradamus,
which operates across 3-30 MHz can be seen on YouTube:
http://tinyurl.com/299g7oy

+ Listen for Paul, 2E1EUB to be active for just a few days from northern
Scotland from his converted van operating as 2M1EUB/P. Paul plans to
to be on the air around June 25-27.

+ The goal of the Moon Zoo website is "to provide detailed crater
counts for as much of the Moon's surface as possible." Interested
parties can help out with this effort by examining images of the
moon's surface and providing feedback to be used by the team of
researchers in charge of the Moon Zoo project. First-time visitors
should click on the "How To Take Part" for a tutorial that will
help determine which project they might be best suited for. See
http://www.moonzoo.org/ for more information.

+ The Amateur Radio contact between the International Space Station
(ISS) and Japanese boy and girl scouts is now available on YouTube.
The contact with Astronaut Soichi Noguchi, KD5TVP, was broadcast on
Japanese cable TV. Watch at: http://tinyurl.com/28y6h7r

+ AMSAT has received the sad news of the passing of Frank Lumney,
W2UHI. He passed away in the early hours of June 3, 2010. Frank
was a great friend and a true asset to the amateur radio community.
Many old time AMSAT operators (AO-13 for example) will remember
Frank. Many years ago, he was also a frequent check-in to the AMSAT-NA
75 meter net. Frank would have turned 88 on July 4.

+ NASA has released the first-ever up close video available for the
public, taken from inside a space shuttle after landing, showing the
checkout procedures and the "towback" to the Orbiter Processing Facil-
ity. It was taken on May 26, 2010 following shuttle Atlantis' landing
following the STS-132 mission. See: http://tinyurl.com/2fbkks4
(UniverseToday.com)

+ Watch the YouTube video at http://tinyurl.com/23fftkg that addresses
one of amateur radio's urban legends regarding homebrewing an antenna
from a Slinky.

[ANS thanks whomever for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the tale of the two trout who were dining in a restaurant when one of them starts waving his empty glass in the air. The waiter observed, "I think there's a fish out of water."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 50. ANS-171 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-06-22 16:28:30 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cb1227$ea7e4780$bf7ad680$@net>
Source record: 353
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-171

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Last Call For Speakers
* BOD Nominations Announced
* AO-51 Field Day Schedule
* Lunar Lander Cubesat Poposed
* 1675-1710 MHz Weather Satellite Band Under Study for Re-Allocation
* Name That Satellite
* Hudson Valley, NY SatCom Net on Thursday
* ARISS Status

SB SAT @ AMSAT $ANS-171.01
Last Call For Speakers

AMSAT News Service Bulletin 171.01
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.01

Hi All,

This is the final call for speakers for the AMSAT-UK Colloquium 2010 which will be held at the Holiday Inn, Guildford, UK (same venue as in 2009) on *Sat 31st Jul and Sun 1st Aug 2010*, with a beginners session on the afternoon of Friday 30th.

AMSAT-UK invite speakers, about amateur radio, space and associated activities to this event, details of which, can be found at:

http://www.uk.amsat.org/content/view/32/42/

As this is a late call, the submission of a paper is not required but any PowerPoint or similar material can be made available online, afterterwards.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:

e-mail: david.johnson AT blackpepper.co.uk

SnailMail: QTHR from www.QRZ.com

Likewise if anyone knows of a good speaker, please send contact and
other information to G4DPZ.

73

Dave
G4DPZ

[ANS thanks Dave, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-171.02
BOD Nominations Announced

AMSAT News Service Bulletin 171.02
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.02

It is my pleasure to announce that the following have been
nominated to serve on the AMSAT Board of Directors for
two year terms:

Tom Clark, K3IO
Lou McFadin, W5DID
Tony Monteiro, AA2TX
Gould Smith, WA4SXM

Candidates will be afforded the opportunity to have statements
of their qualifications and positions circulated to the membership.
In accordance with the bylaws of the Radio Amateur Satellite
Corporation, the ballots will be mailed no later than July 15th,
and must be returned no later than September 15h to be counted.

Since there are four candidates for three seats, the three
candidates having the greatest number of votes will be elected
to full terms. The forth candidate will serve as an alternate
until the next annual election.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-171.03
AO-51 Field Day Schedule

AMSAT News Service Bulletin 171.03
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.03

AO-51 Operations Team Announces Field Day Schedule

It's that time of year again; summer and Field Day! Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June.

For 2010 the event takes place during a 27-hour period from 1800 UTC on Saturday June 26, 2010 through 2100 UTC on Sunday June 27, 2010. Those who set up prior to 1800 UTC on June 26 can operate only 24 hours. The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

AMSAT-NA VP Operations, Drew KO4MA says the AO-51 Command Team and Operations Group has announced the AO-51 configuration for Field Day:

June 21 10:40Z - June 24 09:35Z FM Repeater, V/S to allow testing of V/S station equipment prior to Field Day:
Uplink: 145.880 Mhz FM
Downlink: 2401.200 Mhz FM

June 24 09:35Z - June 27 06:40Z FM Repeater, V/U
Please observe the 1 QSO per repeater Field Day rule
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

June 27 06:40 - June 27 22:00Z FM Repeater, V/S
Please observe the 1 QSO per repeater Field Day rule
Uplink: 145.880 Mhz FM
Downlink: 2401.200 Mhz FM

AMSAT Field Day rules and scoring instructions are available on-line at:
http://www.amsat.org/amsat-new/awards/amsatfd.php
Read the latest AO-51 Command Team and Operations Group News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-171.04
Lunar Lander Cubesat Proposed

AMSAT News Service Bulletin 171.04
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS

BID: $ANS-171.04

Lunar Lander CubeSat Proposed

In a story first reported in the European EE Times, Vermont Technical College, Norwich University, St. Michael's College, and the University of Vermont are working together to land a CubeSat on the moon. (EE Times http://tinyurl.com/22vuz7q)

The team is currently working on initial designs for the spacecraft, with the aim of achieving further NASA funding in June 2011. Primary funding for this effort is being provided by the Vermont Space Grant Consortium under NASA grant.

In the current phase of the program The Vermont CubeSat project, led by Professor Carl Brandon of Vermont Technical College aims to launch by 2015. It is developing the first CubeSat that can be launched from a geostationary orbit to successfully land on the moon. The CubeSat electronics are based on a Texas Instruments (TI) MSP430 processor and the software will control navigation, communications, scientific instruments, camera and the CubeSat's propulsion system.

SPARK, a new high level programming language and toolset designed to support the development of mission critical software will be used for the moonbound cubesat. SPARK was adopted for the CubeSat project because of Vermont Technical College's experience in using SPARK and the related Ada programming language in developing mission critical control systems for a project to create Arctic sea ice monitoring buoys. Both the CubeSat and buoy systems face similar challenges in terms of coping with inhospitable conditions and the impossibility of fixing any software bugs when deployed.

The proposed lunar lander will be a single unit CubeSat (10*10*10 cm) with four mini-thrusters on the bottom to maximize control and manoeuvrability. Two potential options for propulsion are being examined - a bi-propellant booster or a Xenon powered ion drive booster. The Xenon thruster can also be used for a triple CubeSat that would go to and orbit the moon.

[ANS thanks EE Times and the SouthGate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-171.05
1675-1710 MHz Weather Satellite Band Under Study for Re-Allocation

AMSAT News Service Bulletin 171.05
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.05

1675-1710 MHz Weather Satellite Band Under Study for Re-Allocation

The ARRL has picked up on a news item in regards to the National Broadband Plan (NBP) recommending that the FCC should make 500 MHz of spectrum available for broadband use within the next 10 years, including 300 MHz between 225 MHz-3.7 GHz for mobile use in the next five years. One of the first slices of spectrum being eyeballed includes the 1675-1710 MHz band utilized by weather satellites.

The FCC's Office of Engineering and Technology (OET) has engaged in discussions with the National Telecommunications and Information Administration's (NTIA) Office of Spectrum Management to begin examining various frequency bands that may be suitable for mobile broadband use.

NTIA has preliminarily identified the 1675-1710 MHz band for such use and is examining the impact on its incumbent federal users of the weather satellite products. The FCC issued a Public Notice (ET Docket No 10-123) on June 4, 2010, seeking information to help better comprehend the current use of the 1675-1710 MHz band by non-federal entities and better understand its potential utility for broadband.

The full story can be found on the ARRL web site:
http://tinyurl.com/29zv8a6

[ANS thanks the ARRL Letter for June 17, 2010, Editor: S. Khrystyne Keane, K1SFA for the above information]

/EX

SB SAT @ AMSAT $ANS-171.06
Name That Satellite

AMSAT News Service Bulletin 171.06
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.06

SA-AMSAT is inviting radio amateurs to propose a name for its CubeSat project which was announced at the recently held Space Symposium. The project name should be a single word in any of South Africa's official languages and reflect the spirit of the project.

A good example is the name given to the around-the-world-balloon project which is called "lalela", the Zulu word for "listen".

The winning entry will receive a satellite handbook.
Entries should be sent by e-mail to saamsat@intekom.co.za.
SA-AMSAT's web page is at: http://www.amsatsa.org.za/

The closing date is 15 July.

[ANS thanks SA-AMSAT, SARL, and SouthGate for the above information]

/EX

SB SAT @ AMSAT $ANS-171.07
Hudson Valley, NY SatCom Net on Thursday

AMSAT News Service Bulletin 171.07
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.07

The next "HV Satcom" group net is Thursday June 24
8PM (EDT) (Or 2400 UTC), with an echolink Node of
N2EYH-L, & the repeater used is "146.970 (Pl 100;
600 down), & for more info: www.hvsatcom.org
73,.Stu (WA2BSS)
(Director;Mt. Beacon ARC)

[ANS thanks Stu, WA2BSS, for the above information]

/EX

SB SAT @ AMSAT $ANS-171.08
ARISS Report

AMSAT News Service Bulletin 171.08
>From AMSAT HQ SILVER SPRING, MD.
June 14, 2010
To All RADIO AMATEURS
BID: $ANS-171.08

Amateur Radio on the International Space Station (ARISS) Status
ReportJune 14, 2010

1. Upcoming School Contact

Asahi Manabiya, located in Owariasahi, Aichi, Japan, has been
scheduled for an Amateur Radio on the International Space Station
(ARISS) contact on Wednesday, June 23 at 12:48 UTC. Asahi Manabiya
is a volunteer club with approximately 50 members. It hopes to pique
children's interest in natural science including electrical and
electronic phenomena through this ARISS activity.

2. Astronaut Caldwell-Dyson Speaks with ISIS Andrea Ponti via ARISS

On Monday, June 7, students from ISIS Andrea Ponti in Gallarate,
Varese, Italy, linked up with on-orbit astronaut Tracy Caldwell-
Dyson, KF5DBF via an Amateur Radio on the International Space Station
(ARISS) contact. An audience of more than 250 students, teachers and
visitors, located in several classrooms and connected by multimedia
screens, were present for the contact. ARISS mentor Francesco De Paolis,
IK0WGF introduced the event and ARISS activities with a presentation
via phone line. The event was distributed via webcast and was covered
by the local media and newspapers. This contact was the final event
of several cross-curricular activities involving different school
subjects including Science, History, Geography, Math, Information
Technology and English.

3. ARISS News on Amateur Radio Newsline

On June 11, the Amateur Radio Newsline Report 1713 included a short story titled, "Radio from Space: Astroham Congratulates WIA on its 100th Anniversary." The article is about Tracy Caldwell-Dyson's ARISS contact during the WIA's anniversary dinner in which she sent greetings and talked about the advancements in communications over the years. A link to the audio is provided. To view the article, see: ftp://ftp.arnewsline.org/quincy/News/news.txt

4.Astronaut Training Status

Astronaut Tom Marshburn, KE5HOC is scheduled to receive ARISS basic operations training on July 12.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 51. WSR-174 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-06-23 13:04:39 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001e01cb12d4$9078e580$b16ab080$@net>
Source record: 354
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-174.S1
WSR 174 Part 1 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S1
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes until June 24 0935Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 24 0935Z - June 27 0640Z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 27 0640 - June 27 2200Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

After June 27 2200z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06222010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[062252010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-174.S2
WSR 174 Part 2 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S2
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002

Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)

Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes until June 24 0935Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 24 0935Z - June 27 0640Z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 27 0640 - June 27 2200Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

After June 27 2200z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-174.S3
WSR 174 Part 3 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S3
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829

Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129

Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW

[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN

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SB SAT @ AMSAT W8ISS $WSR-174.S4
WSR 174 Part 4 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S4
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
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## 52. ANS-178 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-06-27 01:08:45 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001401cb1595$42f87280$c8e95780$@net>
Source record: 355
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-178

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT 2010 Space Symposium Adds Sunday FermiLab Supercollider Tour
* ARISS-Built AIS Antenna Reports Good Performance On-Orbit
* ARISSat-1 Assembly and Testing Making Progress
* SO-67 SumbandilaSat is Back on the Air
* IARU International Amateur Radio Satellite Forum at Colloquium
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-178.01
AMSAT 2010 Space Symposium Adds Sunday FermiLab Supercollider Tour

AMSAT News Service Bulletin 178.01
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.01

The 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

At the conclusion of the Symposium activities you are invited to participate in a tour of the Tevatron at the Fermi National Accelerator Laboratory on Sunday. Part of the tour will include a tour of the multi-megawatt RF portions of the particle accelerator as well as a tour of the new Super Conducting RF Test Facility. We will be arranging car pools for travel to FermiLab and back to the hotel. The planned start time for the FermiLab tour will be 12 Noon.

The 2010 Symposium Committee has completed the room reservation and registration details for the event. The Hotel booking code for the

Elk Grove Village Holiday Inn is AMS for the AMSAT convention. The $79 per-night room rate will apply for those using this group code.

The direct web page link to the Elk Grove Village Holiday Inn is http://tinyurl.com/22s788d For people needing special accommodations please call the Hotel directly at (847) 437-6010, ask for Brad.

[ANS thanks the 2010 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-178.02
ARISS-Built AIS Antenna Reports Good Performance On-Orbit

AMSAT News Service Bulletin 178.02
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.02

SpaceDaily.com reported this week that ESA's Columbus module maritime Automatic Identification System (AIS) aboard the International Space Station was switched on. The AIS antenna, mounted externally on the Columbus module, was fabricated by AMSAT and ARISS member Lou McFadin, W5DID and the US ARISS team. The team has also fabricated a nearly-identical twin amateur band antenna for ARISS. The ARISS antenna will be used when the Ericsson amateur radio gear is activated in early 2011.

ESA reported receiving more than 90,000 Class A AIS messages during a 14 hour test between 1900 GMT on 2 June and 0900 GMT on 3 June. This generated a global view of maritime traffic as the ISS orbit crosses all major shipping lanes.

AIS is currently a terrestrial VHF system with an average range of 40 nautical miles (74 km). This makes it useful within coastal zones and on a ship-to-ship basis but open ocean traffic remains largely untracked. The Columbus AIS Experiment (COLAIS) detected these signals from orbit. All international vessels, cargo ships above certain weights and passenger carriers of all sizes must carry 'Class A' AIS transponders, broadcasting continually updated identification and navigation data.

An ESA spokesman said, "We are currently testing the NORAIS receiver, built by the Norwegian Defense Research Establishment and Kongsberg Seatex. In three months' time the Station crew will switch it with a second receiver called LUXAIS, the work of Luxembourg companies Luxspace

and Emtronix. For the next two years we will go on swapping between these receivers."

With commissioning completed, the experiment is run remotely and the results are routed via the Columbus Control Centre in Oberpfaffenhofen, Germany to COLAIS teams.

ARISS-International says the cable for operating the Ericsson system in the Columbus Module is in final preparation at Kennedy Space Center for launch to the ISS. Installation is planned for early 2011. At that time the twin ARISS amateur radio antenna on the Columbus module and the second amateur radio station aboard the ISS will be activated.

See the full story at SpaceDaily.com http://tinyurl.com/263rkj7

[ANS thanks ARISS, SpaceDaily.com, and ESA for the above information]

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SB SAT @ AMSAT $ANS-178.03
ARISSat-1 Assembly and Testing Making Progress

AMSAT News Service Bulletin 178.03
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.03

Lou McFadin, W5DID reported that ARISSat-1 is currently undergoing assembly and testing procedures in Orlando, Florida. In preparation for delivery of the ARISSat-1 flight unit to Russia in July continuous operation testing of flight components was started and has gone well.

The next milestone includes completing thermal vacuum testing followed by vibration testing at NASA's Wallops Flight Facility in Virginia prior to shipping the flight version of ARISSat-1 to Russia for the ride up to the ISS on a supply mission.

The ARRISat-1 Guided Tour video produced at Dayton Hamvention 2010 and the latest photos and information can be viewed on-line at: http://arissat1.org/

[ANS thanks ARISS for the above information]

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SB SAT @ AMSAT $ANS-178.04
SO-67 SumbandilaSat is Back on the Air

AMSAT News Service Bulletin 178.04
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.04

Jan-Albert Koekemoer, PrEng at Sun Space & Information Systems (Pty) Ltd. in Stellenbosch, South Africa announced this week, "After much delay we are now in a position to re-activate the SA-AMSAT payload schedules on a regular basis again!"

During the downtime Sun Space conducted several experiments in order to investigate possible alternatives for the "cut-off" problem experienced by many at the end of last year / beginning of this year.

The cut-off is caused by SW running on piggyback electronics that continues to gate the received audio on to the transmitter for about 3s after a specific ground transmission has ended, whereafter the received audio is cut off.

The SW then waits for the next ground transmission with a valid "transponder" tone embedded, before gating the audio onto the transmitter again.
So if a second transmission starts within the 3s "tail" period, it will be cut off when the 3s expires. Listen to this mp3 recording as an example: http://tinyurl.com/38vvg3o

Unfortunately the piggyback electronics does not have reprogramming functionality, so we are not able to change the SW. Sun Space did however manage to implement a mechanism on the satellite transponder (used by the piggyback) that should be of some assistance when using the payload: the PTT of the transmitter now STAYS ON for the duration of the payload activation (i.e. 15 min), regardless of a valid "transponder" tone received. Note that this does not get rid of the "cut-off"

problem, nor of the requirement to embed a valid tone when you want to use the payload - see detailed explanation below.

The following example depicts the ideal usage scenario of the payload:

1. As the satellite comes over the horizon, an unmodulated carrier ("quieting") will be received by all on UHF

2. Person A starts to transmit on VHF (with valid "transponding" tone embedded in the transmission) and the transmission is relayed on UHF

3. When Person A releases his/her PTT, the satellite will continue to transmit what it is receiving (usually this will be "noise") for a further ±3s. Nobody should start to transmit during this time!

4. At the end of the ±3s period, everybody will again hear the unmodulated carrier.

5. NB: only when this unmodulated carrier is heard should Person B start to transmit. Listen to this mp3 recording as an example of valid usage: http://tinyurl.com/32rjbxm

This will take some getting use to - at least the system has a built-in "punishment" mechanism for the impatient! Please refer to previous posts

on general voice quality optimization when using the SA-AMSAT payload on

SO-67.

Gladys Magagula at the Satellite Application Centre to obtain regular schedules from the regional coordinators as soon as possible. We will start off with day passes only, transmit on 2.5W and see how things go. Request for operation over your area should be sent to: saamsat@intekom.co.za by Mondays for possible inclusion in the schedule published on Thursday night/Friday morning cover the following week.

It may not always be possible to accede to every request. The weekly schedule will be published at http://www.amsatsa.org.za/.

Uplink 145.875 MHz
Downlink 435.345 MHz

The Sumbandila team has experienced recent problems with the scheduling system. The schedules for the weekend onward were not uploaded to the satellite. They are working on the problem and will post a message as soon as they have uploaded the schedule.

[ANS thanks Jan-Albert Koekemoer, at Sun Space for the above information]

/EX

SB SAT @ AMSAT $ANS-178.05
IARU International Amateur Radio Satellite Forum at Colloquium

AMSAT News Service Bulletin 178.05
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.05

The IARU International Amateur Radio Satellite Forum will this year be held in conjunction with the AMSAT-UK Colloquium which takes place in Guildford, England on the weekend of July 31 - Aug 1.

The forum, chaired by IARU Amateur Satellite Advisor Hans van de Groenendaal ZS6AKV, takes place on the Sunday morning.

On the Agenda is a report back on the activities of the IARU Satellite Adviser and his Advisory Panel.

There will be a brief presentation covering the ITU notification requirements for satellites operating in the amateur service and the requirement to be able disable transmissions should the signals interfere with other users of the radio spectrum.

The forum is open to all delegates at the colloquium.

Colloquium Info: http://www.uk.amsat.org/colloquium/

[ANS thanks Trevor M5AKA for the above information]

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SB SAT @ AMSAT $ANS-178.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 178.05
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS

BID: $ANS-178.05

+ SpaceWeather.com advises the International Space Station (ISS)
is putting on a remarkable show. For the next few days, the
behemoth spacecraft will be in constant sunlight as its orbit
lines up with Earth's day-night terminator. This means it will
shine brightly in the night sky every single time it passes over
head. Some observers can see it 3, 4, even 5 times a night!
Full story at http://www.spaceweather.com

+ Piraj�, PS8RF says that a new distance record may be accom-
plished soon via AO-7. Joe, K3SZH copied Luciano, PY5LF but
the two stations could not complete a two-way contact during
that orbit. The distance between K3SZH and PY5LF is 7839 KM.

+ Central States VHF Society Conference, St. Louis, MO July 22nd
to 24th. http://www.csvhfs.org/conference/index.html

+ Congratulations to Zeljko 9A2EY on being awarded VUCC Satellite
Award #197.

+ The 2010 CubeSat Summer Workshop takes place in Logan, Utah on
August 7th-8th - the weekend before the Smallsat conference.
The last day to register for the workshop is Friday, July 23rd.
If you wish to present at the workshop the last day to submit an
abstract is Friday, July 23rd. For more information regarding dead-
lines and registration information please visit the cubesat website
at http://www.cubesat.org/index.php/workshops/upcoming-workshops/
or the smallsat website at http://www.smallsat.org/

+ Listen for Patrick WD9EWK/VA7EWK mobile/portable satellite operation
between July 3 - July 11 on Vancouver Island west of the British
Columbia "Lower Mainland". Plans include spending most of Sunday,
July 4 operating from somewhere on the CO60/CO70 grid boundary on
Vancouver Island. Patrick's gear includes an all-mode satellite
station (two FT-817s) and an Elk Antenna. He will try to work as
many passes as possible on the linear and FM satellites.
Patrick has posted information at: http://july2010.wd9ewk.net/

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that,
please keep in mind the young ham who got his first job working in an
orange juice factory but he got canned because he couldn't concentrate.
The young ham's next career was as a lumberjack but he couldn't hack it
so he got the axe. The poor fellow also found that his subsequent job
at the muffler factory was exhausting.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 53. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-07-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1277964001@panix.com>
Source record: 356
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 54. ANS-185 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-07-04 14:39:05 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000f01cb1b86$9de18000$d9a48000$@net>
Source record: 357
Cross-posted to: rec.radio.amateur.space,rec.radio.info
Body handling: HTML body converted to readable text

AMSAT NEWS SERVICE
ANS-185

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2010 AMSAT Space Symposium and Annual Meeting - Call for papers
* 13 Original Colonies Special Event on the Satellites
* AMSAT-UK Colloquium Hotel booking deadline
* AMSAT Field Day Wrap Up - Reminder Send Your Logs
* Long Island Celebration of Amateur Radio Satellite Operation
* Final Call for Papers--2010 ARRL/TAPR Digital Communications Conference
* Final Shuttle Launch Dates Announced
* ARISS Status - 28 June 2010

SB SAT @ AMSAT $ANS-185.01
2010 AMSAT Space Symposium and Annual Meeting - Call for papers

AMSAT News Service Bulletin 185.01
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.01

This is a reminder of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting to be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net.

[ANS thanks AMSAT's 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-185.02
13 Original Colonies Special Event on the Satellites

AMSAT News Service Bulletin 185.02
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.02

As of press time a couple of days remain to work the 13 Original Colonies Special Event stations via amateur radio satellites. The special event has been in progress since July 1 and will end on July 6. Here is the link for more info-

Here are the calls to listen for

NY - Pete, WB2OQQ/K2A
VA - Steve, NL7VX/K2B (July 1 thru AM of July 2)
RI - Fletch, N1RCN/K2C
CT - Paul, K1PL/K2D
DE - Jeff, KB2M/K2E/MM
MD - Bruce, WA3SWJ/K2F
GA - Tim, N3TL/K2G
MA - Dave, KB1PVH/K2H
NJ - John, K2ZA/K2I
NC - Mark, N8MH/K2J
NH - Jack, WA1ZDV/K2K
SC - Art, K4YYL/K2L
PA - Rich, K3BFS/K2M

More info at: http://www.13colonies.info/

[ANS thanks Dave, KB1PVH for the above information]

/EX

SB SAT @ AMSAT $ANS-185.03
AMSAT-UK Colloquium Hotel booking deadline

AMSAT News Service Bulletin 185.03
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS

BID: $ANS-185.03

Jim Heck, G3WGM, Hon. Sec. of AMSAT-UK reports
that the Holiday Inn at Guildford
will release the dedicated rooms for the AMSAT-UK Colloquium on
9 July. So there isn't a great deal of time to be sure of a room.
This year's Colloquium will be held 31 July - 1 August.

Please contact Emily Morris in the Hotel's Business Centre on
+44 (0) 1483 784437 emily.morris@ihg.com.

Further info, prices etc is at:
http://www.uk.amsat.org/content/view/32/42/

Last year there were still rooms available after the deadline,
but one or two delegates left it too late, and ended up in hotels
in other parts of Guildford.

SO PLEASE MAKE YOU BOOKING WITHIN THE NEXT WEEK TO BE SURE OF
AVAILABILITY!

[ANS thanks Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-185.04
AMSAT Field Day Wrap Up - Reminder Send Your Logs

AMSAT News Service Bulletin 185.04
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.04

AMSAT Director Contests and Awards Bruce Paige, KK5DO reminds everyone
who participated in the AMSAT Field Day that you need to email your
results to him. Per the rules....

The Satellite Summary Sheet, available on-line at:
http://www.amsat.org/amsat-new/awards/amsatfd.php should be used for
submission of the AMSAT Field Day competition. It must be received by
KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 12, 2010.
The preferred method for submitting your log is via e-mail to:
kk5do@amsat.org or kk5do@arrl.net.

You will receive an email back (within one or two days) from Bruce when
he receives your email submission. If you do not receive a confirmation
message, try sending it again or send it to Bruce's other email address.

Tim, N3TL noted, "I've never heard AO-7 so busy. I heard more stations
on AO-7 than I've heard in the two years I've been working the satellites
and I stayed in the CW portion of the passband! If CW was that busy, I
suspect the SSB going on above 145.950 was even busier." Tim used an
FT-817ND as the transmit radio, and a Yaesu VR-500 handheld all-mode

receiver as the receive radio connected to an Elk antenna with a Diamond diplexer. In addition to hand-holding the Elk and manually tracking AO-7, Tim said he tuned for Doppler manually and used a straight key for CW. His goal was to show that effective satellite communications doesn't require significant expense and many satellites can be worked with the equipment you already own.

Patrick, WD9EWK/VA7EWK, operated from the Garland Prairie Vista picnic ground in the Kaibab National Forest 20 miles/32km west of Flagstaff AZ, along old US-66 in grid DM45ag. Patrick reported, "For AMSAT Field Day, 14 QSOs on 6 satellites - 6 on AO-7, 4 on FO-29, and one each on the other 4 (AO-27, AO-51, SO-50, VO-52). All done on battery power with a pair of 12V/20Ah jumpstart battery packs, 5W transmitter power, without generators or running off my truck's electrical system."

Andy W5ACM, wrote "Everything worked right this year for the Houston MosQRPitos, operating as W5MSQ near Brookshire, Texas. We were set up for all possible satellite configurations including Mode S down via AO-51. It was great to find AO-7 and FO-29 in good shape and fantastic ops via HO-68. It may have only been one pass at the end of the event, but it was a GOOD one. Thanks to all for the many satellite QSO's."

George, KA3HSW, Satellite op for W9CCU said, "We managed 21 contacts in all ... one on each FM bird and the remainder on the linear sats.I was very impressed at how well AO-7 held up. AO-51 V/S was a treat, and some observers couldn't believe how strong the downlink was with just a corner reflector on the K5GNA downconverter. Nice to have SO-67 back, too!"

A report received from Andrew KE5GDB says, "Field day was quite amazing down here in Houston too. I was one of the operators for K5HOU. I had never heard SO-50 with so many people!"

Bob W7LRD, reported, "We had an absolute blast on field day. AO-7 sounded like a 20M pile up. Even the S band operation on AO-51 was busy. With so many stations on the satellites should we not have more AMSAT members?"

[ANS thanks Bruce, KK5DO and all the reporting stations for the above information]

/EX

SB SAT @ AMSAT $ANS-185.05
Long Island Celebration of Amateur Radio Satellite Operation

AMSAT News Service Bulletin 185.05
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.05

AMSAT NY Area Coordinator, Pete WB2OQQ asks all stations to listen on Saturday, July 10 for the Great South Bay ARC Special Event, "A Celebra-

tion of Amateur Radio" This special event will take place at The Custer Institute, Long Island's Oldest Public Observatory. Pete, WB2OQQ will be "Satellite Active" from 9 AM to 3 PM for FM and Linear Satellite passes. At 3:45 - 4:45 Pete will give a talk on "A History of Amateur Satellites, and how to communicate thru them". A special QSL card will be available, for more information visit, www.CusterObservatory.org or www.gsbarc.org.

[ANS thanks Pete WB2OQQ for the above information]

/EX

SB SAT @ AMSAT $ANS-185.06
Final Call for Papers--2010 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 185.06
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.06

Technical papers are solicited for presentation at the 29th Annual ARRL and TAPR Digital Communications Conference to be held September 24-26, 2010 near Portland, Oregon. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2010. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-185.07
Final Shuttle Launch Dates Announced

AMSAT News Service Bulletin 185.07
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.07

The July 2 UniverseToday.com newsletter reports that NASA announced new target dates for the final two (and maybe three) shuttle missions. STS-133 is now aiming for November 1, 2010 at approximately 4:33 p.m. EDT for the final flight of shuttle Discovery, and for STS-134, Feb-

ruary 26, 2011 at around 4:19 p.m. EST for shuttle Endeavour's last launch. The potential bonus mission STS-135, would launch sometime in August 2011, if approved by Congress and NASA. The latest word on that was that NASA officials hope the decision would be made sometime this month.

[ANS thanks UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-185.08
ARISS Status - 28 June 2010

AMSAT News Service Bulletin 185.08
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.08

1. Upcoming School Contacts

Cavett Kids Foundation's Camp Cavett, based out of OU Medical Center in Kingston, Oklahoma, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, July 8 at 20:35 UTC. The mission of the Cavett Kids Foundation is to provide a forum of support through various camps, events, and programs for children with life-threatening and chronic illnesses while promoting character, coping skills, and connection. Using ARRL (American Radio Relay League) lesson plans, children will be introduced to the basics of radio wave propagation. Local radio clubs will assist with demonstrations and hands on activities.

2. Japanese Club Talks to ISS via ARISS Contact

On Wednesday, June 23, Asahi Manabiya, a volunteer club in Owariasahi, Japan, took part in a direct Amateur Radio on the International Space Station (ARISS) contact. Approximately 145 people attended the event and watched as the youth asked 23 questions of Expedition 23/24 astronaut Tracy Caldwell-Dyson, KF5DBF. This contact was a featured activity used by the club to pique children's interest in natural science. The event drew media attention and was covered by one radio station, two television stations and a newspaper.

3. ARISS Web Page Links to DLN Module

An Amateur Radio on the International Space
Station (ARISS) page may be found on
NASA's Teaching From Space (TFS) Web site. A link to the Digital
Learning Network (DLN) amateur radio module has been added to this page.
See:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.h
tml

4. ARISSat Safety Review to be Held

The Johnson Space Center Payload Safety Review Panel will perform a flight safety review of ARISSat-1 on the mornings of Wednesday and Thursday, June 30 - July 1 in Houston. Participation in the review will include U.S. and Russian ARISSat team members as well as RSC-Energia safety specialists.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

## 55. Radio Meteor Obs. Bull. June 2010

Newsgroup: rec.radio.amateur.space
Date: 2010-07-06 21:15:29 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <f677361ip36d2cu20hbrrbembiipq4pc6v@4ax.com>
Source record: 358
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 203 of June 2010 (97 K) is available now as

http://www.rmob.org/rmobtext/rmob1006.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 56. ANS-192 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-07-11 13:26:57 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cb20fc$b6177870$22466950$@net>
Source record: 359
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-192

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

This is your chance to join in the ranks of AMSAT. There is still an opening (or two) for someone to step in and assist with the ANS editing process. If you are interested, please drop a line to Gould Smith, WA4SXM@amsat.org. There are many other volunteer slots and you can find them in the advertisement in the AMSAT Journal. It takes many helpful hands to keep our group well oiled[lubricated]. (ed.)

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* NASA Releases Videogame Moonbase Alpha
* Phase-3E News
* Amateur satellite to investigate power line interference
* GO-32 Non-operational
* SO-67 Operation Temporally Suspended
* July 2010 AO-51 Schedule
* July 12-16 ARRL Teacher's Institute on the Satellites
* STudSat Launch
* ARISS Status - July 5, 2010

SB SAT @ AMSAT $ANS-192.01
NASA Releases Videogame Moonbase Alpha

AMSAT News Service Bulletin 192.01
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.01

NASA Releases Videogame Moonbase Alpha

This week the MoonBaseAlphaGame.com and the MoonDaily.com web sites report that a free new online game, "Moonbase Alpha" has been released by NASA.

"Moonbase Alpha" allows players to join an exploration team in a futuristic 3D settlement on the south pole of the Moon where you assume the exciting role of an astronaut working to further human expansion and research," NASA said in an explanation of the game.

"Returning from a research expedition, you witness a meteorite impact that cripples the life support capability of the settlement. With precious minutes ticking away, you and your team must repair and replace equipment in order to restore the oxygen production to the settlement. To accomplish their mission, players use an interactive command center, lunar rover and mobile robotic repair units", NASA said.

Moonbase Alpha can be played by one or up to six players. NASA said it is a precursor to a planned NASA-based "multiplayer online game project."
The game is available from the MoonbaseAlphaGame.com web page.

[ANS thanks MoonDaily.com and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-192.02
Phase-3E News

AMSAT News Service Bulletin 192.02
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.02

AMSAT-DL Meets With Germany's Space Agency

An earlier report by Achim Vollhardt, DH2VA, from the AMSAT-DL Annual General Meeting 2010 discussed the joint feasibility study by AMSAT-DL and DLR for lunar and Mars missions. DLR is Germany's national research center for aeronautics and space.

AMSAT-DL board members spent two weeks in the CEF (Concurrent Engineering Facility) of DLR in Bremen. Despite different views on the technical project management Dr. Achim Vollhardt described cooperation with the staff of the DLR as very constructive and mutually very useful.

The results of the study were presented in early May 2010 in a final presentation at the DLR in Cologne. Attendees included representatives of the DLR program Directorate, Peter Guelzow, DB2OS, and Hartmut Paesler, DL1YDD. The results were received by all participants as very positive and leading to further cooperation with the DLR. AMSAT-DL noted this was the first time the technical feasibility of their P5E Mars mission was confirmed by an independent team of experts.

Peter Guelzow sees the results of the study and the dialogue with politicians as an important foundation to the completion of P3E and as a strong argument for future negotiations with potential donors

and launch operators.

[ANS thanks the SouthgateARC web site for the above information]

/EX

SB SAT @ AMSAT $ANS-192.03
Amateur satellite to investigate power line interference

AMSAT News Service Bulletin 192.03
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.03

Amateur satellite to investigate power line interference
Hans van de Groenendaal ZS6AKV will be giving a presentation on South Africa's first CubeSat at the AMSAT-UK Colloquium in Guildford, England, July 31- Aug 1.

The world has experienced a long solar minimum which means that ionospheric communication had been very limited and for a few years was almost exclusively the domain of the commercial broadcasters running Megawatts.

HF radio communication is very susceptible to noise levels that are created by power lines, electrical installations and overhead lines used by trains and busses and power line telecommunication systems. If fact today there are many installation that do not necessarily comply with internationally agreed emission standards. With increasing solar activity interference signals are propagated over large areas and will interfere with HF communication.

The important mission of the SA AMSAT CubeSat is to measure the High Frequency noise levels over South Africa and report these measurement back to a ground station for analysis and action to reduce these unwanted signals. The information from the tiny satellite will identify the areas where the HF frequency polluters are situated and will help in reducing or eliminating the source.

It is also hoped to include a 30 kHz linear transponder and an Automatic Packet Reporting System (APRS) in the CubeSat.

AMSAT-UK International Space Colloquium,
Guildford July 31 - Aug 1
http://www.uk.amsat.org/colloquium/

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-192.04
GO-32 Non-operational

AMSAT News Service Bulletin 192.04
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.04

Hi All,
I have received the UK copy of Oscar news and there is an article
stating that GO-32 is now non-operational and has completed its
11 year mission successful. However, due to the degraded state of
the solar panels it cannot keep the software in a stable condition.

The ground operating station has asked that we mark this satellite as
no longer able to support any continued operation.

It's a shame to hear as this was a great strong satellite for
operating APRS on.

[ANS thanks Chris, M0DQO, for the above information]

/EX

SB SAT @ AMSAT $ANS-192.05
SO-67 Operation Temporally Suspended

AMSAT News Service Bulletin 192.05
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.05

Sumbandilasat SO-67 Operation Temporally Suspended

News posted on the SA-AMSAT web page (http://www.amsatsa.org.za/)
reports, "Due to the erratic operation of the onboard computer,
SO67 operations have been suspended while the ground station inves-
tigates the problem. It is expected that recent changes in the soft-
ware that operates the amateur payload could be the cause."

SA AMSAT will advise the amateur world when operation will be resumed.

SA AMSAT requested, "Once the green light is given, requests for opera-
tion over your area should be sent to saamsat@intekom.co.za by Mondays
for possible inclusion in the schedule published on Thursday night/Fri-
day morning covering the following week. It may not always be possible
to accede to every request. The weekly schedule will be published on
the SA AMSAT web page at http://www.amsatsa.org.za/.

With recent changes in software please note the following operating
procedure.

The PTT of the transmitter now STAYS ON for the duration of the payload
activation (i.e. 15 min), regardless of a valid "transponder" tone rece-
ived. Note that this does not get rid of the "cut-off" problem, nor of
the requirement to embed a valid tone when you want to use the payload -

see detailed explanation below.

The following example depicts the ideal usage scenario of the payload:

1. As the satellite comes over the horizon, an unmodulated carrier
("quieting") will be received by all on UHF.

2. Person A starts to transmit on VHF (with valid "transponding" tone
embedded in the transmission) and the transmission is relayed on UHF.

3. When Person A releases his/her PTT, the satellite will continue to
transmit what it is receiving (usually this will be "noise") for a
further 3s. Nobody should start to transmit during this time!

4. At the end of the 3s period, everybody will again hear the
unmodul-
ated carrier.

5. NB: only when this unmodulated carrier is heard should Person B start

to transmit.

In simple repeater operation terms, leave a 3 second gap between overs.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-192.06
July 2010 AO-51 Schedule

AMSAT News Service Bulletin 192.06
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.06

Command Team and Operations Group AO-51 News
July 2010 AO-51 Schedule

Due to poor battery condition, AO-51 will be off during
eclipses. Until further notice the schedule will remain:

FM Repeater, V/U
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

The 67Hz PL tone is required to activate the repeater,
which will run unsquelched for two minutes after hearing
a valid tone. Within that two minute period,
no tone is required.

73, Drew KO4MA

AMSAT-NA VP Operations

AO-51 Echo Mode Suggestion Email Address
mailto:ao51-modes@amsat.org?subject=51%20web%20page%20request
The AO-51 Operations Group is made up of Amsat Members who are also AO-51 users. The Operations Group works with the Command Team to create the monthly schedule for the satellite. The AO-51 Operations Group is OZ1MY, VK5HI, N8BBQ, KD8CAO. The Command Stations are KO4MA, WA4SXM, WA6FWF, and N8MH.

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-192.07
July 12-16 ARRL Teacher's Institute on the Satellites

AMSAT News Service Bulletin 192.07
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.07

July 12-16 ARRL Teacher's Institute on the Satellites

ARRL Education and Technology Program Coordinator, Mark Spencer, WA8SME will conduct the Dayton Amateur Radio Association sponsored ARRL TI-2 Teacher's Institute - Space next week in Dayton from July 12 through 15.

The purpose of this teacher's institute is to instruct teachers on how to access satellites for use in their classrooms. The four day institute will involve a lot of on-the-air activity on the birds.

Mark invites you to listen up for the teachers who will be working the birds for the first time and help participate in the TI by making contacts with them. They will be novice satellite operators so he hopes you will forgive mistakes as they learn the ropes. It will be interesting to see how 8 ground stations operate from one location! (The stations consist of FT817s, ARROWS and computer controlled G5500 rotors.)

If anyone needs a contact with W1AW/8, Mark will be using that call sign periodically while doing some demonstrations during the TI. If you have a specific request, let Mark know via e-mail and he'll listen for your call specifically. Mark's address is mspencer@arrl.org.

[ANS thanks Mark, WA8SME for the above information]

/EX

SB SAT @ AMSAT $ANS-192.08
STudSat Launch

AMSAT News Service Bulletin 192.08
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010

To All RADIO AMATEURS
BID: $ANS-192.08

'StudSat' is to be launched aboard the Indian PSLV C 15 on
12th July 2010. The lift off is at 03:52 Z and the StudSat
is to be injected into orbit around 04:12 Z. The CW beacon
would be 'ON' at 04:42 Z, ie 30 minutes after separation
from the launcher.
Beacon Frequency is 437.861 Mhz (10 mW).
During its first pass, around 04:50 Z, stations around
west and North Mexico, Western Coast of US, Canada, Alaska,
and North Asia would be able to receive the beacon signal.

We request stations over these regions to kindly listen
on to the beacon frequency and provide us with their valuable
reports. These initial reports are the only means for us to
confirm on the 'Beacon ON' until it is visible over VU land.
This help would be greatly appreciated.

Thanks in advance.

Mani, VU2WMY
Secretary & Station-In-Charge
Upagrah Amateur Radio Club VU2URC
ISRO Satellite Centre

A L S O...
The 51-hour countdown for the 17th flight launch of Indian space
agency's
Polar Satellite Launch Vehicle PSLV-C 15 from Sriharikota spaceport is
expected to begin on Saturday morning.

Preparations were in full swing for the launch of the PSLV-C-15 on July
12. All the parameters for the launch were doing well and the 51-hour
countdown was expected to start at 6 am tomorrow.

TIsat-1: Swiss CubeSat
Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
Callsign: HB9DE
http://www.spacelab.dti.supsi.ch/tiSat1.html

StudSat : India CubeSat
Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
http://www.teamstudsat.com/

http://www.indianexpress.com/section/technology/698/
http://www.indianexpress.com/news/51hour-countdown-for-pslvc15-launch-sta
rts
-tomorrow/644288/

http://www.ne.jp/asahi/hamradio/je9pel/suitsfun.htm

JE9PEL, Mineo Wakita

[ANS Thanks Mani, VU2WMY, & Mineo, JE9PEL, for the above info]

/EX

SB SAT @ AMSAT $ANS-192.09
ARISS Status July 5, 2010

AMSAT News Service Bulletin 192.09
From AMSAT HQ SILVER SPRING, MD.
July 5, 2010
To All RADIO AMATEURS
BID: $ANS-192.09

Amateur Radio on the International Space Station (ARISS) Status Report
July 5, 2010

1. Upcoming School Contact

Cavett Kids Foundation's Camp Cavett, based out of OU Medical Center in Kingston, Oklahoma, was scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, July 8 at 20:35 UTC. The mission of the Cavett Kids Foundation is to provide a forum of support through various camps, events, and programs for children with life-threatening and chronic illnesses while promoting character, coping skills, and connection. Using ARRL (American Radio Relay League) lesson plans, children were introduced to the basics of radio wave propagation and local radio clubs assisted with demonstrations and hands on activities.

2. Astronaut Speaks with Summer Camp via ARISS

Expedition 24 astronaut Doug Wheelock, KF5BOC participated in an Amateur

Radio on the International Space Station (ARISS) contact with summer camp
"Astronauts in Forest," in Perugia, Italy on Friday, July 2. The connection
was provided by telebridge station ON4ISS in Belgium. Wheelock managed eight questions put to him by the camp which was attended by twenty children and four staff members. The camp, which is based on astronomy and space education, provides a program of space activities for children, ages 11 to 14.

3. ARISS Included in Brazilian Space Agency Videos

Brazilian Space Agency AEB has produced two videos about the International
Space Station. The videos were recorded by astronaut Marcos Pontes and are
the first videos showing ARISS activities in Portuguese. See:

Part 1 http://www.youtube.com/user/PY1KCF#p/a/u/1/vilmCC7RRQ0
Part 2 http://www.youtube.com/user/PY1KCF#p/a/u/0/GJll0WZfYmg

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

## 57. ANS-199 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-07-18 01:36:30 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001101cb2618$ee44d4b0$cace7e10$@net>
Source record: 360
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-199

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* It's Time to Send in Your 2010 Symposium Paper Abstract
* Live Webstream of AMSAT-UK Space Colloquium
* South Pacific Total Solar Eclipse Captured in AO-51 Telemetry Data
* New Distance Record for AO-7 DX
* ISS Active on Amateur Radio
* ARRL Teacher Institute Space Operation Successful
* India PSLV-C15 Launch Includes Two New Cubesats
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-199.01
It's Time to Send in Your 2010 Symposium Paper Abstract

AMSAT News Service Bulletin 199.01
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.01

The September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is rapidly approaching! So far the Proceedings crew has received two abstracts for papers - thank you!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted an author's guide on the AMSAT.org web page: http://tinyurl.com/2djjnmx

The 2010 AMSAT Space Symposium and Annual Meeting will be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

[ANS thanks JoAnne, K9JKM for the above information]

/EX

SB SAT @ AMSAT $ANS-199.02
Live Webstream of AMSAT-UK Space Colloquium

AMSAT News Service Bulletin 199.02
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.02

The 2010 Space Colloquium - the 25th held by AMSAT-UK, is taking place on July 31 and August 1 at the Holiday Inn in Guildford, England.

As usual there will be many interesting presentations and demonstrations from the developers and users of the ever increasing number of amateur radio satellites. In addition there will be talks on nano propulsion systems, solar sails, cubesat sized linear transponders, the GENSO ground station network, GNU radios and numerous other topics.

It is still possible to attend the meeting itself, although the "early booking" rates may now no longer be available - for booking details see: http://www.uk.amsat.org/colloquium

If, however, you are unable to attend in person, we can announce that the batc.tv webstream service will again be provided over the weekend starting from 1000 BST (0900UTC) on Saturday, July 31.

The current programme - which is always subject to late changes - can be seen at http://www.uk.amsat.org/content/view/713/284/ - again please

note that all timings are given BST which is UTC +1.

The BATC.TV webstream will be available here, click on Live Events
http://www.batc.tv/

AMSAT-UK
http://www.uk.amsat.org/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-199.03
South Pacific Total Solar Eclipse Captured in AO-51 Telemetry Data

AMSAT News Service Bulletin 199.03
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.03

On July 11 a total solar eclipse was observed in the southern Pacific Ocean. The path of totality stretched across the South Pacific Ocean, but the Moon's umbral shadow didn't make landfall except for a few spots such as the Cook Islands and Easter Island, and southern Chile and Argentina. A partial eclipse was visible from a much larger region covering the South Pacific and southern South America.

Masa, JN1GKZ noted a glitch in AO-51's Whole Orbit Data file (WOD) in the Total Array I current while AO-51 was located east of Argentina at the time. AO-51 Control Station, Mark, N8MH replied, "You have made a great observation, and I think you are exactly right about the cause of the observed 'glitches' in the telemetry. Usually at this point in its orbit we would observe AO-51 charging its batteries at a steady rate from fully illuminated panels."

Mark plotted some of the telemetry collected from 1800-2130utc) and posted it at:
http://www.amsat.org/amsat/ftp/telemetry/ao51/2010WOD/July2010/Wd071100_1800to2130utc_solar_eclipse.xls (watch the line wrap!)

A screenshot of AO-51 at the time:
http://www.amsat.org/amsat/ftp/telemetry/ao51/2010WOD/July2010/ao51_11July2010_2045utc_solar_eclipse.jpg (watch the line wrap!)

Alex, OZ9AEC ran a simulation using the Celestia space simulator and observed a partial solar eclipse as seen from AO-51. He recorded this simulation to a video and you can watch at:
http://www.youtube.com/watch?v~T8BhbqmVk

The Whole Orbit Data file for the eclipse can found at:
ftp://ftp.amsat.org/pub/amsat/telemetry/ao51/2010WOD/July2010/Wd071100

AO-51 WOD decoder can be downloaded from:
http://tinyurl.com/DK3WNsoftware

[ANS thanks Masa, JN1GKZ; Mark N8MH; and Alex, OZ9AEC for the above information]

/EX

SB SAT @ AMSAT $ANS-199.04
New Distance Record for AO-7 DX

AMSAT News Service Bulletin 199.04
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.04

A new distance record of 7843 km (4898 Miles) via AO-7 was established on July 15 between Luciano, PY5LF and Joe, K3SZH. The estimated maximum range of AO-7 is ~7,900 km. Piraj&#65533;, PS8RF noted that the log of QSO can be seen on the unofficial AO-7 web site:
http://www.planetemily.com/ao7/ao7log.php.
Congratulations to both Luciano and Joe!

[ANS thanks Piraj&#65533;, PS8RF for the above information]

/EX

SB SAT @ AMSAT $ANS-199.05
ISS Active on Amateur Radio

AMSAT News Service Bulletin 199.05
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.05

For several days last week, Colonel Doug Wheelock, KF5BOC, took to the air from the ISS to talk to hams around the globe. The 2-meter FM phone frequencies for voice operation with the ISS over the US are 144.490 MHz uplink with 145.800 MHz downlink.

Dee, NB2F noted, "I Just talked with the ISS. Loud and Clear. Good sigs and thanks to the ISS crew for making contacts." Damon, WA4HFN wrote, "I made my first ISS voice contact with NA1SS. He was full meter reading!" Greg, KO6TH also noted the strong downlink signal.

Later in the week the ISS crew activated the SSTV equipment to support the Moscow Aviation Institute experiment (MAI-75) on July 15 and 16. The system operated the space cam in slide show mode. The latest ISS SSTV information can be found on-line at:
http://ariss-sstv.blogspot.com/
The images uploaded by users can be found on-line at:
http://www.amsat.org/amsat/ariss/SSTV/.

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-199.06
ARRL Teacher Institute Space Operation Successful

AMSAT News Service Bulletin 199.06
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.06

ARRL Education and Technology Program Coordinator, Mark Spencer, WA8SME conducted the Dayton Amateur Radio Association sponsored ARRL TI-2 Teacher's Institute - Space this week in Dayton. The purpose of this teacher's institute is to instruct teachers on how to access satellites for use in their classrooms. The four day institute will involve a lot of on-the-air activity on the birds.

Concluding a successful session, Mark wrote, "I want to offer my sincerest thanks to the satellite community, Drew, and AMSAT for the support that you gave us during the TI-2 Space this year. Over the last three days, your support in making contacts with the teachers, and in particular, the dedicated SSTV activity on AO51, has made the TI-2 Space a huge success this year. I wish each of you could have seen the glowing light bulbs in the teachers' heads at each successful satellite contact. I am confident that they will be taking what they learned this week back into their classrooms to make space 'alive' for their students. Thanks for the patience you showed as these novice satellite operators learned the tricks of the trade."

Mark also noted the success of having 8 satellite ground stations, and antennas operating at one time.

[ANS thanks Mark Spencer, WA8SME for the above information]

/EX

SB SAT @ AMSAT $ANS-199.07
India PSLV-C15 Launch Includes Two New Cubesats

AMSAT News Service Bulletin 199.07
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.07

Reporting from the Upagrah Amateur Radio Club VU2URC, at the ISRO Satellite Centre in India, Mani, VU2WMY said the July 12 launch of the 17th flight launch of Indian space agency's Polar Satellite Launch Vehicle PSLV-C 15 from Sriharikota was successful. Mani wrote, "All the five satellites including the StudSat and TISat aboard the PSLV-C15 were successfully separated from the vehicle and they are in the [correct] 640 Km orbit right now."

The PSLV-C15 launch included a primary payload of the CartoSat-2B remote sensing satellite and AlSat-2A satellite. The three other satellites included AISSat-1, a Norwegian Defence Research Establishment satellit to demonstrate a new maritime AIS receiver; and the TISat-1 and StudSat amateur radio banded cubesat payloads.

TIsat-1: Swiss CubeSat
Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
Callsign: HB9DE
http://www.spacelab.dti.supsi.ch/tiSat1.html

StudSat : India CubeSat
Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.861 MHz (10 mW), 20bps ASK
http://www.teamstudsat.com/

Shortly after launch Alan, ZL2BX reported, "Good signals from TISat over ZL 0926 to 0936 when the signals stopped abruptly shortly before predicted LOS. Copied HI HI HI TISAT H."

Christian, F1AFZ, noted the beacon on 437.305 MHz TIsat-1 was on over Europe HI HI HI TISAT K." He posted a recording of the pass at:
listen:
http://www.f1afz.fr/satellites/new_2010/tisat_12-07-2010_8h45tu.mp3

Paolo, HB9TYP says TIsat-1 is in power/battery saving mode during eclipse. Its transmission is limited or completely shut off according to on board rules. On behalf of the TIsat-1 team Paolo thanks the AMSAT community for signal reports already received. He says you can find the latest keps and other details on the project and mission status webpages:
http://www.spacelab.dti.supsi.ch/tiSat1MS.php. The TIsat-1 team invites your continued feedback. While copying the beacon please collect and report the character emitted AFTER "HI HI HI TISAT" along with time in UTC, your location and signal quality.

A Video of the launch is on line at http://tinyurl.com/29ukc4l

[ANS thanks Mineo Wakita, JE9PEL; Mani, VU2WMY; Alan, ZL2BX; Christian, F1AFZ; and Paolo, HB9TYP for the above information]

/EX

SB SAT @ AMSAT $ANS-199.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 199.08
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.08

+ AMSAT Keplerian Elements Guru Ray Hoad, WA5QGD noted this week
that the following satellites have decayed from orbit and have
been removed from the KEPS distribution list:
1. DRAGNSAT Cat# 35690, Decay date 3-17-2010.
2. POLLUX Cat# 35693, Decay date 3-29-2010.
STUDSAT Cat# 36801, Launched 7-12-2010 has been added to the
distribution list. The Swiss Cubesat TIsat-1 has now been iden-
tified as object #36796 and will be added shortly.

+ Stu WA2BSS reminds radio amateurs that the next Hudson Valley
Satcom Net will meet on Thursday July 22 at 2000 EDT (2400 UTC).
The Echolink node is: N2EYH-L, The net meets on the air on the
146.97 MHz repeater. More info: http://www.hvsatcom.org.

+ Mineo Wakita, JE9PEL noted that Japan's CO-65 (Cute-1.7+APD II)
is in Digipeater Mode during weekends. The CO-65 digipeater is
accessed using standard AX.25 protocol. The uplink of the digi-
peater is 1267.600 MHz and the downlink 437.475 MHz using 9600
bps GMSK. Mineo refers interested amateurs to these web pages
for further information:
http://lss.mes.titech.ac.jp/ssp/cute1.7/amateur_service_e.html
http://www.ne.jp/asahi/hamradio/je9pel/ct17gmsk.htm
http://www.ne.jp/asahi/hamradio/je9pel/ct17gms2.htm
http://www.kc2rlm.info/soundcardpacket/

+ WorkedGrids is a freeware Windows application that displays a map
showing Amateur Radio grid squares contacted and logged using a
third-party logging program. The app was developed by VE2ZAZ, and
uses colors to display information on a per-band basis. Up to four
bands can be displayed concurrently. For its input, the program
reads the plain-text ASCII log files generated by most logging pro-
grams. The file is read at a set interval and the worked grid squares
on the map are updated in a dynamic way as the contest progresses
and the log file is periodically saved. WorkedGrids can be down-
loaded from http://tinyurl.com/24okrtm.

+ SaturnDaily.com noted an interesting NASA JPL video produced from
Cassini orbiter radar data showing a fly-by simulation of Ontario
Lacus, the largest lake in the southern hemisphere of Saturn's moon
Titan. Watch at: http://www.jpl.nasa.gov/video/index.cfm?id=2

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that
please keep in mind the young ham who got a job in the shoe factory but
found that he didn't fit in. When he tried working at the deli they told
him he didn't cut the mustard. He found that he just wasn't up to it in
his latest job feeding the giraffes at the zoo.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 58. WSR-201 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-07-21 12:17:17 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001401cb28ce$9a22b150$ce6813f0$@net>
Source record: 361
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-201.S1
WSR 201 Part 1 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S1
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[062252010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-201.S2
WSR 201 Part 2 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S2
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S2

StudSat : India CubeSat
Catalog Number:
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[07202010]
=====
TIsat-1: Swiss CubeSat
Catalog Number:
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[07202010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====

Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845

Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-201.S3
WSR 201 Part 3 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S3
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
---
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826

Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]

=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-201.S4
WSR 201 Part 4 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S4
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 59. UN BELIVABLE HOT PHOTOS&VIDEOS

Newsgroup: rec.radio.amateur.space
Date: 2010-07-22 09:28:43 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <412ccfb2-b4b4-4f78-80bd-7aac983c8b9d@g1g2000pre.googlegroups.com>
Source record: 362

KATRINA KAIF BATH ROOM VIDEO

http://hotvideosee.blogspot.com/2010/07/katrina-in-bath.html

MUMAITH KHAN HOT SEXY PHOTO

http://hotvideosee.blogspot.com/2010/03/hot-photo-5_27.html

PRIYAMANI SEXY PHOTO

http://hotvideosee.blogspot.com/2010/03/hot-photo-6.html

HOT&SEXY AUNTY IN A ROMANTIC FEEL

http://hotvideosee.blogspot.com/2010/03/hot-photo-3.html

FOR HOT HEROINES PHOTOS

http://hotheroinesphoto.blogspot.com

AISHWARIYARAI HOT EXPOSING PHOTO

http://hotheroinesphoto.blogspot.com/2010/06/aishwariyarai-hot-photo.html

ANKITHA IN A TUB BATH

http://hotheroinesphoto.blogspot.com/2010/06/ankitha-in-tub-bath.html

TO SEE 100 HOT PHOTO GALLERIES

http://hotheroinesphoto.blogspot.com

## 60. ANS-206 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-07-25 13:58:12 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000901cb2c00$b210d1e0$163275a0$@net>
Source record: 363
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-206

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISS Contact Scheduled for 100th Anniversary of Scouting
* Satellite DXpedition Opportunities
* Presentations Scheduled at AMSAT-UK Colloquium 30 July-1 Aug
* AMSAT-NA Board of Directors Election Reminder
* AMSAT 2010 Space Symposium - Sign Up and Send Us Your Papers!
* Sumbandilasat Returns For Testing
* September Launch for India Ham Radio Satellite SRMSat
* LightSail-1 Passes Critical Design Review
* ARISS Status - 19 July 2010

SB SAT @ AMSAT $ANS-206.01
ARISS Contact Scheduled for 100th Anniversary of Scouting

AMSAT News Service Bulletin 206.01
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.01

On the morning of July 26 Fort A. P. Hill, Virginia will be the fastest growing city in the country. 43,000 scouts and leaders will join 8,000 volunteers to celebrate 100 years of scouting in the US. The 46 members of the K2BSA staff will be on the job to provide support and information to arriving Hams through the 2m and 70cm on site repeaters.

The K2BSA demonstration station will be located south east of the Mahone staff area. The demo station will provide tours and demo-nstrate Amateur Radio to visiting scouts and scouters. Scouts visiting the K2BSA station will have the opportunity to earn their Radio Merit Badge. The staff will teach the Radio Merit Badge at the Merit Badge Midway. Scouts can complete all the requirements

required for the merit badge.

The K2BSA licensing staff will teach a Technician license class daily during the jamboree. The scout will learn everything he needs during the 6 hour class to pass the Technician Class license exam. Every night in the licensing tent the K2BSA licensing staff will offer an ARRL VE sponsored test session for all license classes.

Scouts are also offered the opportunity to upgrade their Amateur Radio License. Technician class licensees may upgrade to General by passing a 35-question multiple-choice examination. General licensees may upgrade to Extra Class by passing a 50-question multiple-choice examination.

ARISS reports that a contact with the International Space Station is a go on Sat 2010-07-31 18:21:06 UTC for a 56 deg elevation pass over the 2010 National Boy Scout Jamboree, Fort A. P. Hill, Virginia. Amateur Radio operators in North American may wish to monitor the 145.800 MHz downlink frequency at this time.

[ANS thanks K2BSA for the above information]

/EX

SB SAT @ AMSAT $ANS-206.02
Satellite DXpedition Opportunities

AMSAT News Service Bulletin 206.02
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.02

CHINA
-----
News received from Michael Chen, BD5RV/4 reports that a group of operators will be active from China's Pingtan Island, IOTA AS-138, Grid OL95vn, from July 24 to 30. They will be active as B4R/5 in the RSGB IOTA contest and homecall/5 in regular operation. Activity will be on all HF bands and V/UHF bands, including EME and all active satellites. The group plans to use HO68, AO51, VO52, SO50, AO27.

An analysis of HO-68's schedule and terrestrial footprint by Alan Kung, BA1DU predicts that North East Asia, South Asia, Central Asia, Oceania, and Alaska will be within range of the DXpedition.

The group includes BA4TA, BA4TB, BA4RS, BD5RV, BA4RN, BH4REQ, and BH4RLO.

NORTH AMERICA
-------------
John, K8YSE says he is planning a 3 or 4 week grid expedition around Lake Superior during the week of August 2. The grids planned are:

EN28-29-36-37-38-39-46-47-48-49-56-57-58-59-63-64-65-66-67-68-69-73-
74-75-76-77-78-79-83-84-86-87 and EO30 in both the US and Canada.

John plans FM and SSB activity but probably little CW if any.
This is a sightseeing trip around Lake Superior but he will do
my best to operate on the birds as much as possible. The planned
route is on John's website: http://www.papays.com/sat

[ANS thanks Michael Chen, BD5RV/4; Alan Kung BA1DU; and John, K8YSE
for the above information.]

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SB SAT @ AMSAT $ANS-206.03
Presentations Scheduled at AMSAT-UK Colloquim

AMSAT News Service Bulletin 206.03
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.03

FRIDAY 30 July

A satellite beginners session (content to be finalised) will be run by
Dave Johnson, G4DPZ; Carlos Eavis, G0AKI and Ivo Kilnkert, PA1IVO on
Friday afternoon.

SATURDAY 31 July

Opening / Welcome Prof. Sir Martin Sweeting, G3YJO

Development of a Small Scaled Helicon Double layer Thruster
Tom Harle, Surrey Space Centre

CubeSail nano-satellite project
Lourens Visagie, Surrey Space Centre

AMSAT-NA Presentation
Barry Baines, President AMSAT-NA, WD4ASW

"The FUNcube project update"
The Project Manager Jim Heck G3WGM et. al.

Tiny U-V Transponder
William Leijenaar, PE1RAH

P3E/P5A - IHU3
Mario Lorenz, DL5MLO

FUNcube SimSat
Jim Heck, G3WGM

GENSO Presentation
Miguel Eduardo Gil Biraud, ESA

STK and matlab for orbital and attitude simulation
Tilman Glotzner, DG2TG

Orbit Determination with GENSO
Ivo Klinkert, PA1IVO

SUNDAY 1 Aug

IARU Satellite Meeting (Colloquium attendees welcome)
Chairman: Hans van de Groenendaal ZS6AKV

AMSAT-DL Presentation
Peter Guelzow, DB2OS

New Cubesat project from AMSAT-SA
Hans van de Groenendaal ZS6AKV

South Africa back in Space, an update on SO67, the CPUT 3U cubesat
Hans van de Groenendaal ZS6AKV

Satelliite Bands - What's New
Murray Niman, G6JYB

GNU Radio
Alex Csete, OZ9AEC

myPocketQub.com - an open source nano satellite project
Chris Brunskill

Clyde-Space Presentation
Steve Greenland

Group for Earth Observation (ENVISAT presentation)
Francis Bell, GEO

ESEO and QB50
Graham Shirville, G3VZV

AMSAT-UK Colloquium Schedule
http://www.uk.amsat.org/content/view/713/284/

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-206.04
AMSAT-NA Board of Directors Election Reminder

AMSAT News Service Bulletin 206.04
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.04

AMSAT-NA members,

The biographies and ballot for the 4 candidates for the AMSAT Board of Directors went out on July 15th. In order to be counted, your ballot must be RECEIVED at the AMSAT office by the close of business on September 15th. Now is a good time to review the biographical information, ask questions, and study the minutes of the recent Board of Directors meetings from the AMSAT Journal. Finally, please vote. This, along with the yearly opportunity to stand for election, is your best opportunity to influence the direction of our organization.

73,

Alan Biddle
WA4SCA
AMSAT-NA Corporate Secretary
[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-206.05
AMSAT 2010 Space Symposium - Sign Up and Send Us Your Papers!

AMSAT News Service Bulletin 206.05
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.05

The 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

At the conclusion of the Symposium activities you are invited to participate in a tour of the Tevatron at the Fermi National Accelerator Laboratory on Sunday. Part of the tour will include a tour of the multi-megawatt RF portions of the particle accelerator as well as a tour of the new Super Conducting RF Test Facility. We will be arranging car pools for travel to FermiLab and back to the hotel. The planned start time for the FermiLab tour will be 12 Noon.

The 2010 Symposium Committee has completed the room reservation and registration details for the event. The Hotel booking code for the Elk Grove Village Holiday Inn is AMS for the AMSAT convention. The $79 per-night room rate will apply for those using this group code.

The direct web page link to the Elk Grove Village Holiday Inn is http://tinyurl.com/22s788d For people needing special accommodations please call the Hotel directly at (847) 437-6010, ask for Brad.

The September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is rapidly approaching! So far the Proceedings crew has received two abstracts for papers - thank

you!

The abstract for your paper does not require any special format.
Simply send an e-mail to the Proceedings Editor, K9JKM with the
basic information: Author Name, Callsign, and a few sentences that
describe your proposed topic. We'll be looking forward to receiving
your abstracts at k9jkm@comcast.net.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-206.06
Sumbandilasat Returns For Testing

AMSAT News Service Bulletin 206.06
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.06

SA AMSAT reports on their web page http://www.amsatsa.org.za/ that
operations are slowly being resumed on SO-67. The ground control
station will observe the amateur payload to ensure the satellite
remains stable and then gradually add more operating time.

SA AMSAT requested, "Once the green light is given, requests for
operation over your area should be sent to saamsat@intekom.co.za by
Mondays for possible inclusion in the schedule published on Thursday
night/Friday morning covering the following week. It may not always
be possible to accede to every request. The weekly schedule will be
published on the SA AMSAT web page.

With recent changes in software please note the recommended operating
procedure described at: http://www.amsatsa.org.za/

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-206.07
September Launch for India Ham Radio Satellite SRMSat

AMSAT News Service Bulletin 206.07
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.07

An Amateur Radio satellite being built by students of SRM University
in Chennai may be launched by the Indian Space Research Organization
(ISRO) in September.

A description of the SRMSAT ground station indicates it may use the
bands 145.8MHz for the uplink and 434.5MHz for the downlink. An SRM

University press release describes SRMSAT as a 15 watt satellite weighing between 10 and 15 kg and measuring one meter cube. The satellite will be constructed at the university.

"This project is aimed at increasing the technical expertise of our staff and students and giving them the rare opportunity of constructing a satellite first-hand with ISRO scientists guiding them. We want to prove that our students are worthy of this feat. We hope to launch a satellite once in every two years, of course, with different scientific objectives," says P Satyanarayana, vice-chancellor, SRM University.

Read the NDTV story 'ISRO may launch nano satellite in September' at http://tinyurl.com/25x3vy8

SRMSAT Information
http://www.prlog.org/10719954-future-perfect-of-srm-university.html

SRMSAT Ground Station
http://srmuniv.academia.edu/ssn/Papers

SRMSAT Yahoo Group
http://tech.groups.yahoo.com/group/srmsat/

Chennai Hams VHF/UHF/HF Enthusiasts Forum
http://chennaihams.blogspot.com/2010/03/asol-exam-conducted-at-srm-universit
y.
html

[ANS thanks SouthGate ARC for the above information]

/EX

SB SAT @ AMSAT $ANS-206.08
LightSail-1 Passes Critical Design Review

AMSAT News Service Bulletin 206.08
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.08

LightSail-1, the Planetary Society's new ultra-light 3U Cubesat-based solar sail spacecraft, has passed its Critical Design Review.

At a two-day meeting in Pasadena, a team - including JPL project veterans Bud Schurmeier, Glenn Cunningham, Viktor Kerzhanovich, and Aerospace Corporation's Dave Bearden - reviewed the LightSail-1 project from soup to nuts and gave the thumbs up to proceed with building the spacecraft's hardware and software.

LightSat-1will demonstrate that sunlight alone can propel a spacecraft in Earth orbit. The 4.5-kilogram spacecraft is an amazing advance in technology -- analogous in my mind to the miniaturization of computers two decades ago.

LightSail-1 has:

o 10 solar panels -- four deployable arrays with panels on each side
plus one panel on the top and one on the bottom of the spacecraft,
o Two 2-megapixel cameras mounted at the end of two of the solar panels
o Four Sun sensors mounted at the end of four of the solar panels,
o Six tiny ultra-sensitive accelerometers that will provide a direct
measure of the light-force,
o A momentum wheel for attitude control,
o Three single axis gyros,
o Three torque rods also part of the attitude control system,
o A battery

More details at
http://www.planetary.org/programs/projects/solar_sailing/20100625.html

LightSail-1
http://www.planetary.org/programs/projects/solar_sailing/lightsail1.html

[ANS thanks The Planetary Society for the above information]

/EX

SB SAT @ AMSAT $ANS-206.09
ARISS Status - 19 July 2010

AMSAT News Service Bulletin 206.09
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.09

1. ARISS Contact with Girl Guides of Canada

On Friday, July 16, the Girl Guides of Canada spoke with on-orbit
astronaut Doug Wheelock, KF5BOC via an Amateur Radio on the Inter-
national Space Station (ARISS) contact. The initial call to the
ISS was made by the Commissioner of Girl Guides of Canada. Wheelock
then answered 14 questions posed to him by twelve girls while an
audience of approximately 2000 Girl Guides and Girl Scouts from around
the world looked on. The girls had gathered at Guelph Lake, Ontario
for the Guiding Mosaic 2010 to celebrate the 100th anniversary of Girl
Guides in Canada. The Guides prepared for the contact by studying
orbital mechanics and learning about the value of successful inter-
national partnerships.

2. MAI-75 Experiment Activated

The Russian ISS crew members activated the MAI-75 (Moscow Aviation
Institute) experiment on July 15 and 16. The system operated Space
Cam in slide show mode using the Martin 1 format. Among those who
captured Slow Scan Television (SSTV) images transmitted by the crew
were ground stations in South America, Europe and Africa.
For more information, see: http://ariss-sstv.blogspot.com/
Images have been archived here: http://www.amsat.org/amsat/ariss/SSTV/ .

3. Astronaut Training Status - Upcoming Simulation Contacts

Astronauts Ron Garan, KF5GPO, and Mike Fossum, KF5AQG, have been scheduled for simulated Amateur Radio on the International Space Station (ARISS) contacts with the Challenger Learning Center of Indianapolis on Thursday, July 22 at approximately 16:00 UTC and 16:15 UTC respectively. The contact should be available on IRLP (Internet Radio Linking Project) Node 9010. These training sessions are terrestrial-based amateur radio contacts using ARISS equivalent equipment.

4. ISS Ham Debrief Scheduled

An Amateur Radio on the International Space Station (ARISS) debrief session has been scheduled with Expedition 22/23 astronaut T. J. Creamer, KC5WKI on Monday, July 19. The feedback provided will help ARISS update program operations.

5. ARISS - Camp Cavett Contact in the News

On Thursday, July 8, Cavett Kids Foundation's Camp Cavett in Kingston, Oklahoma, participated in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Doug Wheelock, KF5BOC. Channel 12 KXII Dara Downs covered the contact and a news clip has been posted to YouTube: http://www.youtube.com/watch?v=UF7BHbNGYbc

For News Talk Radio KRMG's press release, go to:
http://krmg.com/localnews/2010/07/oklahoma-kid-campers-to-talk-w.html

The September issues of CQ and CQ VHF are expected to carry stories on the contact as well.

6. ARISS News on Amateur Radio Newsline

On July 16, the Amateur Radio Newsline Report 1718 posted a short story which talked about general ham radio contacts made by astronaut Doug Wheelock on the ISS. To view the article, "Ham Radio in Space: ISS Random Contacts Back," see: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

## 61. WSR-211 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-07-30 19:17:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <004601cb301b$d75a4a20$860ede60$@net>
Source record: 364
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-211.S1
WSR 211 Part 1 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S1
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-211.S2
WSR 211 Part 2 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S2
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S2

StudSat : India CubeSat
Catalog Number:
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[07202010]
=====
TIsat-1: Swiss CubeSat
Catalog Number:
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[07202010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====

Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845

Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-211.S3
WSR 211 Part 3 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S3
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
---------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826

Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]

=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-211.S4
WSR 211 Part 4 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S4
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 62. HOT ACTRESS

Newsgroup: rec.radio.amateur.space
Date: 2010-08-01 05:53:15 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <7d5277e8-8573-44e3-80c5-55bb2b1345ba@m35g2000prn.googlegroups.com>
Source record: 365

FOR HOT HEROINES PHOTOS

http://hotheroinesphoto.blogspot.com

AISHWARIYARAI HOT EXPOSING PHOTO

http://hotheroinesphoto.blogspot.com/2010/06/aishwariyarai-hot-photo.html

ANKITHA IN A TUB BATH

http://hotheroinesphoto.blogspot.com/2010/06/ankitha-in-tub-bath.html

NAMITHA SEXY PHOTO IN BEACH

http://hotheroinesphoto.blogspot.com/2010/06/namitha-in-beach.html

CHARMI IN A SEXY FEEL

http://hotheroinesphoto.blogspot.com/2010/06/sexy-charmi.html

CHENNAI HOT GIRLS WITH SWIM WEAR

http://hotheroinesphoto.blogspot.com/2010/06/chennai-hot-girls.html

KAJAL AGARWALHOT PHOTO

http://hotheroinesphoto.blogspot.com/2010/06/kajal-agarwal-hot.html

KATRINA KAIF IN A HOT SAREE

http://hotheroinesphoto.blogspot.com/2010/06/hot-katrina.html

## 63. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-08-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1280642401@panix.com>
Source record: 366
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 64. ANS-213 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-08-03 00:32:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000001cb32a2$aeb37b80$0c1a7280$@net>
Source record: 367
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-213

ANS is a free, weekly, news and information service of
AMSAT North America, The Radio Amateur Satellite Corporation.
ANS reports on the activities of a worldwide group of
Amateur Radio operators who share an active interest in
designing, building, launching and communicating through
analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

**********
* Please return the AMSAT BOD Ballots*
* by September 15th, 2010 *
**********

In this edition:
* Reminder: Symposium Call For Papers Deadline is Coming
* UK Space Agency to launch CubeSat
* Satellite Shorts
* Balloon Launch Project
* Astronauts Complete Simulation Contacts
* ARISS Status - July 26, 2010

SB SAT @ AMSAT $ANS-213.01
Reminder: Symposium Call For Papers Deadline is Coming

AMSAT News Service Bulletin 213.01
From AMSAT HQ SILVER SPRING, MD.
August 1,, 2010
To All RADIO AMATEURS
BID: $ANS-213.01

It's already August 1 and the September 1 deadline of the call for
papers for the 2010 AMSAT Space Symposium and Annual Meeting is
approaching faster than ever! The abstracts and some completed
papers have arrived - thank you. For everyone else - we need to
get busier!

The abstract for your paper does not require any special format.
Simply send an e-mail to the Proceedings Editor, K9JKM with the
basic information: Author Name, Callsign, and a few sentences that
describe your proposed topic. I'll be looking forward to receiving

your abstracts in my in-box at k9jkm@comcast.net.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted an author's guide on the AMSAT.org web page: http://tinyurl.com/2djjnmx

The 2010 AMSAT Space Symposium and Annual Meeting will be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-213.02
UK Space Agency to launch CubeSat

AMSAT News Service Bulletin 213.02
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.02

UK Space Agency to launch CubeSat
The UK Space Agency has announced a one-year pilot programme to design and launch a CubeSat and is running a competition for ideas for payloads.

This miniature, cube-shaped satellite will allow the UK to test new space technologies and carry out new space research 'cheaply' and quickly.

The pilot programme, named UKube 1, will use a spacecraft platform that is currently under development by the company Clyde Space Ltd and will involve a competition amongst companies and academic groups to come up with the most innovative ideas for payloads. The winning payloads will be launched on the satellite in mid 2011.

Companies and academics who are interested in designing a payload can contact the UK Space Agency for more information.

There is another CubeSat under construction in the UK called
FUNcube.

It is being built by AMSAT-UK and the hardware will be shown at
the AMSAT-UK International Space Colloquium in Guildford
July 31 - Aug 1.

This event is being streamed live to the web at
http://www.batc.tv/ (click on Live Events)

UK Space Agency Announcement
http://www.ukspaceagency.bis.gov.uk/19128.aspx

AMSAT-UK FUNcube
http://www.funcube.org.uk/

[ANS thanks Southgate News for the above information.]

/EX

SB SAT @ AMSAT $ANS-213.03
Satellite Shorts

AMSAT News Service Bulletin 213.03
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.03

+ Clint, K6LCS and Gordon West, WB6NOA will be giving a public AMSAT
demonstration and presentation from the award-winning amateur radio
booth at the Orange County Fairgrounds on August 5, 2010 at 5:45PM PDT.

+ The Scouting SpaceJam-4 Weekend will be on August 6-8, 2010 at the
Chanute Air Museum in Rantoul IL (between Chicago and Champaign, IL).
Amateur radio features include an APRS balloon launch transmitting on
144.39 MHz every minute under the call sign, W9YJ-11 and an ARISS
contact with the scouts. The ISS-direct-to WB9SA contact is sched-
uled for a 36 degree elevation pass on Sat 2010-08-07 15:07:14 UTC.
More information about SpaceJam-4 can be found at:
http://www.spacejamboree.com

+ Stu, WA2BSS reminds interested amateur satellite operators that the
the dates for the next two Hudson Valley Satcom nets are Aug. 5 & 19.
The 2 M repeater used is:146.970 MHz (2M Pl. 100) Time: 8PM EDT, or
2400 UTC. The EchoLink node is N2EYH-L. More info: www.hvsatcom.org.

+ Bruce, VE9QRP is asking for input from amateur satellite operators.
He is designing a microcontroller system for doppler tuning portable
radios. He is looking for information regarding which HTs or mobile
radios are CAT-controllable. He is testing this concept with an TH-D7A
and reports it works well. Bruce's e-mail is ve9qrp_at_gmail.com.
His web page is at: http://ve9qrp.blogspot.com. He demonstrates his
project in a video at: http://www.youtube.com/user/VE9QRP.

+ While this video link is more related to new technology than the Amateur satellite program many radio amateurs will find learning about D-STAR technology interesting at: http://tinyurl.com/25moy7d (via SouthGateARC)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-213.04
Balloon Launch Project

AMSAT News Service Bulletin 213.04
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.04

In association with Tom Webb, WA9AFM/5, President, Oklahoma City Autopatch Association, the North Texas Balloon Project would like to dedicate their Launch No. 18 to the memory of fellow ham, John Mark "Rob" Robbins.

Just two weeks ago, John Robbins, NO5X, became a Silent Key. John was a founding member of the Near Space Exploration Group in the OKC/Tulsa area. We conducted several balloon launches from OKC until John's health prevented his participation and leadership. It was John's goal to do a record setting flight for an amateur radio balloon. He came very close, but never succeeded.

The John Mark Robbins Memorial Flight will be launched by the North Texas Balloon Project (NTEXBP) at about 8:30 am CDT on August 7, 2010 from the municipal airport in Hillsboro, Texas, just south of Fort Worth and Dallas. The public is invited to come out to the Hillsboro Municipal Airport, located at Exit 3 on Interstate Highway 35W, to watch the launch. The back up launch date is August 14, 2010.

Three payload packages containing sensors and amateur radios will be carried to nearly 100,000 feet in about 90 minutes by a helium balloon and return via parachute in about 50 minutes. Mobile recovery teams will use position reports from the onboard GPS and APRS transmitter on 144.390 MHz and radio direction finding techniques to recover the payloads.

A cross band repeater will be activated soon after launch. Uplink is 445.800 MHz and downlink is 147.560 MHz. At the peak altitude ham radio operators from Texas, New Mexico, Oklahoma, Arkansas, Louisiana, and Kansas can contact each other using the cross band repeater.

The third payload of the flight is a ten meter beacon operating on a frequency of 28.274 MHz. The antenna is a home brew loop and the transmitter will be running approximately 1 watt. This beacon may be heard world wide if the band is open. Please report reception and we will happily QSL the event. Email webmaster@ntexbp.org or

kdvickers@aol.com

Pre-launch activities will begin about 7:00 am CDT with the HF
Launch Net on 7260 +/- 5 KHz, LSB beginning around 8:00 am CDT.
Follow us on HF radio or on Twitter@NTEXBP. Saturday's launch will
show on APRS as W5SJZ-11.

[ANS thanks Keith, W5IU, for the above information]

/EX

SB SAT @ AMSAT $ANS-213.05
Astronauts Complete Simulation Contacts

AMSAT News Service Bulletin 213.05
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.05

Astronauts successfully complete amateur radio
simulation contacts.

Astronauts Ron Garan, KF5GPO, and Mike Fossum, KF5AQG,
each successfully completed a simulated Amateur Radio
on the International Space Station (ARISS) contact with
the Challenger Learning Center of Indianapolis on
Thursday, July 22.
Hopefully they will become as active as the present ISS crew
And carry out some casual contacts with others throughout
The World.

Garan and Fossum answered 14 and 22 questions respectively
during their contacts.

These training sessions were terrestrial-based amateur
radio contacts using ARISS equivalent equipment.

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-213.06
ARISS Status - July 26, 2010

AMSAT News Service Bulletin 213.06
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.06

Amateur Radio on the International Space Station
(ARISS) Status Report July 26, 2010

1. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact was completed with the 2010 National Boy Scout Jamboree in Fort A.P. Hill, Virginia on Saturday, July 31 at 18:21 UTC. The jamboree is being planned for about 43,000 Scouts and leaders in 825 troops, plus some 5,000 staff members for support, program and headquarters services. The K2BSA Amateur Radio Demonstration Area is a hot spot of activity throughout the Jamboree. At past Jamborees, thousands of Scouts toured K2BSA. More than 300 earned their Radio Merit Badges and more than 100 new Technician licenses were earned. The club supporting this event is the K2BSA Amateur Radio Association.

2. ARISS Contact with International Space University Students

On Wednesday, July 21, International Space University in Illkirch-Graffenstaden, France, participated in an Amateur Radio on the International Space Station (ARISS) contact with Shannon Walker, KD5DXB on the ISS. Twelve questions were answered and regional television covered the event. In preparation for their contact, students studied the basics of satellite communications and learned about human spaceflight and space exploration.

3. ARRL Covers 2010 National Scout Jamboree

The American Radio Relay League (ARRL) posted a story on its web page covering the upcoming 2010 National Boy Scout Jamboree during which an ARISS contact was planned. The article was also included in the ARRL Letter. See:
http://www.arrl.org/news/connect-with-the-national-scout-jamboree-via-amateur-radio

4. ARISS-Brazil Web Page Updated

ARISS-Brazil has updated its Web page. The site has a new URL:
http://www.qsl.net/py1kcf/

5. Astronaut T. J. Creamer Participates in ISS Ham Debrief

An Amateur Radio on the International Space Station (ARISS) debrief session was held with Expedition 22/23 astronaut T. J. Creamer, KC5WKI on Monday, July 19. The feedback received will help ARISS with its program operations.

6. ARISS International Team Meeting Held

The Amateur Radio on the International Space Station (ARISS) International Team teleconference was held on Tuesday, July 20. Discussions included a status on the Columbus Module radio equipment as well as an update on ARISSat-1. The minutes have been posted.
See: https://www.rac.ca/ariss/arisstel2010-07-20.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 65. WSR-218 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-08-07 13:53:02 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cb3637$cfdbf0b0$6f93d210$@net>
Source record: 368
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-218.S1
WSR 218 Part 1 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S1
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-218.S2
WSR 218 Part 2 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S2
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1: Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====

Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845

Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-218.S3
WSR 218 Part 3 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S3
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
---
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826

Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]

=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-218.S4
WSR 218 Part 4 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S4
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 66. Radio Meteor Obs. Bull. July 2010

Newsgroup: rec.radio.amateur.space
Date: 2010-08-07 17:22:02 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <bg5r56pjckh93sq7t06n8906bo5a1sma3s@4ax.com>
Source record: 369
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 204 of July 2010 (84 K) is available now as

http://www.rmob.org/rmobtext/rmob1007.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 67. ANS-220 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-08-08 01:12:21 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701cb3696$bad756a0$308603e0$@net>
Source record: 370
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-220

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* 2010 AMSAT Space Symposium Timeline
* Get Those Symposium Papers Rolling Please!
* Boy Scouts Celebrate Anniversary with ARISS Contact
* Operational Notes From AO-51 Control Team
* SumbandilaSat SO-67 South African Passes Planned for Testing
* Taiwan University Announces Plans for Attitude Controlled CubeSat
* AMSAT-UK Colloquium Videos Available
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-220.01
2010 AMSAT Space Symposium Timeline

AMSAT News Service Bulletin 220.01
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.01

The 2010 Symposium Committee is at work regarding the details of
The schedule. The details depend on the topics and quantity of the
presentations still being worked on by the authors.

We will generally follow the timing framework of previous year's
Symposiums which can be summarized as:

Thursday, October 7
AMSAT Board of Directors Meeting

Morning Friday, October 8
Symposium Registration Opens
AMSAT Board of Directors Meeting continues
Lunch

Friday, October 8 (1300)
Registration continues
Symposium Opening Remarks and Introductions
First Round of Presentations until ~1700

Saturday, October 9
Registration continues
Second Round of Presentations (0800 - 1000)
AMSAT General Membership Meeting (1000 - 1200)
Lunch
Third Round of Presentations (1300 - 1700)
Break
Attitude Adjustment with Cash Bar and Gathering (~1800)
AMSAT Annual Banquet and Speaker (~1900)
Door Prize Drawing (~2100)

Sunday, October 10
Area Coordinators Field Ops Breakfast
Fourth Round of Presentations (0800 - 1000)
Symposium Closing Remarks
Tour of FermiLab Tevatron (1200 - 1500 approx.)

The times listed are US Central Daylight Time (UTC - 5).

AMSAT's 2010 Symposium Committee looks forward to welcoming
everyone to Chicago this October!

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-220.02
Get Those Symposium Papers Rolling Please!

AMSAT News Service Bulletin 220.02
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.02

August is rolling on and the September 1 deadline of the call for
papers for the 2010 AMSAT Space Symposium and Annual Meeting is
approaching faster than ever! So far 7 abstracts and two completed
papers have arrived - thank you. For everyone else - we need to
get busier!

The abstract for your paper does not require any special format.
Simply send an e-mail to the Proceedings Editor, K9JKM with the
basic information: Author Name, Callsign, and a few sentences that
describe your proposed topic. I'll be looking forward to receiving
your abstracts in my in-box at k9jkm@comcast.net.

These can be on any topic of interest to the amateur satellite
community. We request a tentative title of your presentation as
soon as possible, with final copy submitted by September 1, 2010

for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted
an author's guide on the AMSAT.org web page:
http://tinyurl.com/2djjnmx

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-220.03
Boy Scouts Celebrate Anniversary with ARISS Contact

AMSAT News Service Bulletin 220.03
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.03

On Saturday, July 31, an Amateur Radio on the International Space
Station (ARISS) contact was held with the 2010 National Boy Scout
Jamboree in Fort A.P. Hill, Virginia. Doug Wheelock, KF5BOC answer-
ed 13 questions posed to him by the Scouts as approximately 800
others listened in.

Andrew Koenig, KE5GDB, who is Amateur Radio Newsline's 2009 Young
Ham of the Year, initiated the biggest contact of the jamboree.
Six Scouts representing Georgia, North Carolina, Pennsylvania, and
Wisconsin, all got a chance to ask astronaut Wheelock a question,
some relating to Scouting and the space program.

Prior to the contact, K2BSA Amateur Radio Association set up its
radio station which thousands of Scouts toured. Some Scouts earned
their Radio Merit Badges and amateur radio licenses as well. This
year, the Jamboree celebrates 100 years of Scouting in the U.S.,
with attendees from all 50 states and other countries around the
world. Forty-three thousand Scouts attended the National Jamboree.

K2BSA also operated on the satellites from the 2010 National Scout
Jamboree amateur radio station. QSL cards for the 100th anniversary
are available. Send your card, and SASE, to the QRZ.com K2BSA address.

[ANS thanks Carol, KB3LKI; Andrew Koenig, KE5GDB; and David Jordan,
AA4KN for the above information]

/EX

SB SAT @ AMSAT $ANS-220.04
Operational Notes From AO-51 Control Team

AMSAT News Service Bulletin 220.04
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS

BID: $ANS-220.04

After a brief outage aboard AO-51, AMSAT Vice-President of Operations, Drew KO4MA reported on Saturday, July 31 that the satellite had been restored to service. The 145.92/435.300 repeater was set to run with the 67 Hz tone required to activate the satellite. Power output was 740 mW.

On 5 August AO-51's operating mode was changed enable the 435.150 telemetry transmitter at 340 mW. This was to provide a telemetry collection demonstration for a cubesat team.

During the demonstration the 435.300 voice transmitter continued to operate at about 470 mW with PL tone activation of the transmitter. At the conclusion of the demonstration the Control Team changed the mode back to the 145.92/435.300 repeater running about 750 mW with PL tone activation of the transmitter. The 435.150 transmitter was turned off.

Please use the webpage at http://oscar.dcarr.org/ or post reports via the amsat-bb. For some reason very few US stations use this. Please do as it is impossible for the AO-51 Control Team to listen to every pass.

Keep up with the latest AO-51 Control Team news on-line at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA and Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-220.05
SumbandilaSat SO-67 South African Passes Planned for Testing

AMSAT News Service Bulletin 220.05
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.05

SA AMSAT has announced that, after consultation with the CSIR Satellite Application Centre (SAC), more passes over South Africa will be scheduled.

During the week, these passes will be in the evening and on weekends during the day and on some evenings.

If you are scheduling a special event at a school, a special morning pass can be scheduled on request by sending an email to saardt@intekom.co.za at least 2 weeks prior to the event. More details about passes over other areas will be announced soon.

Hans, ZS6AKV, presented a paper at the AMSAT UK Satellite Colloquium on Sunday, August 1 which discussed how best to accommodate other parts of the world on SO-67. The SA AMSAT web page at http://www.amsatsa.org.za/

invites satellite operators to, "Watch this space for the international schedule."

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-220.06
Taiwan University Announces Plans for Attitude Controlled CubeSat

AMSAT News Service Bulletin 220.06
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.06

A team from the Department of Aeronautics and Astronautics and the Department of Electrical Engineering at the National Cheng Kung University in Taiwan has announced a 2X CubeSat development project named PACEsat, Platform for Attitude Control Experiment.

This cubesat will feature three-axis stabilization utilizing a miniature momentum wheel and magnetic coils. Attitude determination will use a three-axis magnetometer, a three-axis gyro, and coarse sun sensors. Temperature sensors will monitor the thermal environment inside the satellite.

Frequencies discussed in the satellite design documentation include 145 MHz is selected for uplink and downlink communication and 433 MHz CW/AX.25.

The satellite was designed for a 600km near-circular orbit with a 98 degree inclination. Mission lifetime is planned to be 2 months. A stable attitude determination and attitude control system is a prerequisite for future CubeSat missions which will include propulsion systems to attain higher orbits.

Technical details can be found on-line at:
http://tinyurl.com/2evtd7a
http://www.iaalab.ncku.edu.tw/pace/

[ANS thanks the PACEsat team for the above information]

/EX

SB SAT @ AMSAT $ANS-220.07
AMSAT-UK Colloquium Videos Available

AMSAT News Service Bulletin 220.07
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.07

Videos of the presentations given at the 25th AMSAT-UK International Space Colloquium are now available on the web. You can view and download them at: http://www.batc.tv/ Click on the 'Film Archive' icon and then select an 2010 AMSAT video from the pulldown menu on the left.

The Colloquium schedule can be seen at:
http://www.uk.amsat.org/content/view/713/284/1/2/

AMSAT-UK publishes a colour A4 newsletter, OSCAR News, which is full of Amateur Satellite information. Join online at:
https://secure.amsat.org.uk/subs_form/

"Getting started on Amateur Radio Satellites" PDF file is available at: http://www.uk.amsat.org/content/view/408/168/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-220.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 220.08
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.08

+ AMSAT received the sad news that John, NO5X has become a silent key. (via AA5JG)

+ AMSAT-NA Corporate Secretary Alan Biddle, WA4SCA reminds members that biographies and ballot for the 4 candidates for the AMSAT Board of Directors went out on July 15th. In order to be counted, your ballot must be RECEIVED at the AMSAT office by the close of business on September 15th.

+ Congratulations to John, W6ZKH on receiving the ARRL W.A.S. Satellite Award #320.

+ Videos from this weekends CubeSat workshop are at:
http://www.ustream.tv/recorded/6493870 (via M5AKA)

+ A video showing an Amateur Radio Satellite demonstration to members of the South Dublin Radio Club EI2SDR can be viewed on-line at:
http://tinyurl.com/23wn239
A YouTube video features Amateur Radio operators in contact with Doug Wheelock KF5BOC on the International Space Station using the call NA1SS on 145.800 MHz FM can be viewed at:
http://tinyurl.com/28cyd6w

+ Watch for a new feature in the AMSAT Journal. Keith Baker KB1SF/VA3KSF will begin a column called, "Getting Started in Amateur Satellites".

+ The Mid-Atlantic States VHF Conference will be on Saturday, Sept 25.
Register at http://dataandwireless.com/packrat/vhf_registration.php
K1DS & KB1JEY will host a Beginner's Session - a One Day Conference
for experts and beginners alike hosted by the Mt Airy VHF RC Club.

+ John K8YSE reports he has hit the road and is heading toward his
satellite grid expedition around Lake Superior.

+ The Echoes of Apollo team says plans are being worked on for a big,
coordinated, world wide EME (Moon Bounce) event for Yuri's Night,
on or about April 12, 2011. The 2010 event featured Arecibo being
activated on EME. They hope to bring a lot of big dishes on board.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that,
please keep in mind the hams who wondered what the attractive young lady
carrying batteries at the beach was up to. Eventually they figured out
that she sold C Cells by the seashore, of course.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 68. ANS-227 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-08-15 14:38:44 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000901cb3c87$88929370$99b7ba50$@net>
Source record: 371
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-227

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2010 AMSAT Space Symposium Reminders
* ISS cooling system problem disrupts ARISS operations
* HO-68 Operating Schedule 15-22 August 2010
* ARRL Files Petition to Deny 433-445 MHz ReconRobotics Applications
* NASA Announces CubeSat Launch Initiative
* Satellite Shorts From All Over
* For Hams Who Like Science: Einstein@Home

SB SAT @ AMSAT $ANS-227.01
2010 AMSAT Space Symposium Reminders

AMSAT News Service Bulletin 227.01
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.01

The September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is rapidly approaching! So far the Proceedings crew has received two abstracts for papers - thank you!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

You can now register on-line at the AMSAT store for the 2010 AMSAT Space Symposium and Annual Meeting:
http://www.amsat-na.com/store/SymposiumReg.php

The 2010 Symposium Committee is looking forward to welcoming you
to Chicago in October! As the latest information becomes available
you can find it on the AMSAT Symposium pages:
http://www.amsat.org/amsat-new/symposium/2010/index.php

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-227.02
ISS cooling system problem disrupts ARISS operations

AMSAT News Service Bulletin 227.02
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.02

On Saturday, July 31, 2010, The ISS suffered a cooling system failure.
Repair work planning for two spacewalks has been underway throughout the
week to fix the problem. As a result, ARISS operations which include both
voice and packet have been given a low priority until the problem is
resolved. Attempts will be made to carry out scheduled ARISS contacts, but
with the understanding that they may be aborted at the last minute.

[ANS thanks David, AA4KN, for the above information]

/EX

SB SAT @ AMSAT $ANS-227.03
HO-68 Operating Schedule 15-22 August 2010

AMSAT News Service Bulletin 227.03
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.03

The following operating schedule for HO-68 (XW-1) was provided by Alan Kung,
BA1DU,
HO-68 Project Manager. Dates and times shown are UTC.

15 Aug 2010
==========
16:35...Turn On--FM/PACSAT
India, Africa, Middle East,
Europe,NA
17:20...Turn Off

18:25...Turn On--FM/PACSAT
Africa,Europe,Middle East,NA
19:10...Turn Off

19:50...Turn On--FM/PACSAT
Africa,Europe,Middle East,NA

20:35...Turn Off

16 Aug 2010
==========
00:15...Turn On--FM/PACSAT
South America,NA,North Asia
01:00...Turn Off

02:11...Turn On--FM/PACSAT
North Asia,East Asia,South Asia
02:27...Turn Off

16:20...Turn On--FM/PACSAT
Africa,Europe,NA
17:05...Turn Off

22:10...Turn On--FM/PACSAT
NA,North Asia,East Asia,
Oceania
22:55...Turn Off

17 Aug 2010
==========
00:00...Turn On--FM/PACSAT
South America,NA,North Asia
00:45...Turn Off

10:10...Turn On--FM/PACSAT
Oceania,Asia,Europe
10:55...Turn Off

16:00...Turn On--FM/PACSAT
India,Middle East,Europe,NA
16:45...Turn Off

17:50...Turn On--FM/PACSAT
Africa,Europe,NA
18:35...Turn Off

21:50...Turn On--FM/PACSAT
NA,North Asia,East Asia,
Oceania
22:35...Turn Off

18 Aug 2010
==========
09:55...Turn On--FM/PACSAT
Oceania,East Asia,North Asia,Europe
10:40...Turn Off

16:00...Turn On--FM/PACSAT
Africa,Europe,NA
16:45...Turn Off

21:35...Turn On--FM/PACSAT
NA,North Asia,East Asia,Oceania
22:20...Turn Off

19 Aug 2010
==========
01:42...Turn On--FM/PACSAT
South Asia,Oceania
02:00...Turn Off

06:40...Turn On--FM/PACSAT
Middle East,India,Africa
07:25...Turn Off

09:35...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
10:20...Turn Off

12:15...Turn On--FM/PACSAT
Europe,NA,South America
13:00...Turn Off

17:15...Turn On--FM/PACSAT
Africa,India,Middle East,Europe,NA
18:00...Turn Off

18:45...Turn On--FM/PACSAT
Africa,Europe,NA
19:30...Turn Off

21:20...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
22:05...Turn Off

20 Aug 2010
==========
09:20...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
10:05...Turn Off

12:00...Turn On--FM/PACSAT
Europe,NA,South America
12:45...Turn Off

17:00...Turn On--FM/PACSAT
India,Africa,Europe,NA
17:45...Turn Off

22:50...Turn On--FM/PACSAT
South America,Africa,NA,
Europe,North Asia,East Asia
23:35...Turn Off

21 Aug 2010
==========

00:40...Turn On--FM/PACSAT
South America,NA,North Asia
01:25...Turn Off

02:30...Turn On--FM/PACSAT
North Asia,East Asia,South Asia
02:45...Turn Off

10:50...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
11:35...Turn Off

13:25...Turn On--FM/PACSAT
Europe,NA,South America
14:10...Turn Off

16:45...Turn On--FM/PACSAT
Africa,Europe,NA
17:30...Turn Off

22:35...Turn On--FM/PACSAT
South America,NA,North Asia
23:20...Turn Off

22 Aug 2010
==========
00:20...Turn On--FM/PACSAT
NA,North Asia,East Asia,
South Asia,Oceania
01:05...Turn Off

02:21...Turn On--FM/PACSAT
North Asia,East Asia,South Asia
02:37...Turn Off

05:50...Turn On--FM/PACSAT
North Asia,Europe,Africa
06:35...Turn Off

13:10...Turn On--FM/PACSAT
Europe,NA,South America
13:55...Turn Off

[ANS thanks Alan, BA1DU, for the above information]

/EX

SB SAT @ AMSAT $ANS-227.04
ARRL Files Petition to Deny 433-445 MHz ReconRobotics Applications

AMSAT News Service Bulletin 227.04
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS

BID: $ANS-227.04

The ARRL Letter this week reported that on August 4, 2010, the ARRL filed a Petition to Deny Applications with the FCC to deny 68 pending Public Safety Pool license applications associated with the Recon-Robotics Video and Audio Surveillance System.

Each license application is accompanied by a waiver request to permit operation of the devices in the 433-445 MHz band. The applications were coordinated by APCO International Inc Licensing Services -- the frequency coordinator for the public safety land mobile radio services -- and would allow the use of the Recon Scout product currently being marketed by ReconRobotics pursuant to an FCC waiver. Read more here: http://www.arrl.org/news/arrl-files-petition-with-fcc-to-deny-applications-with-reconrobotics.

[ANS thanks the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-227.05
NASA Announces CubeSat Launch Initiative

AMSAT News Service Bulletin 227.05
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.05

NASA said at the end of July that the space agency anticipates launch opportunities for a limited number of CubeSats may be available on launches currently planned for 2011 and 2012. These launch opportunities would constitute a pilot project intended to demonstrate viable launch opportunities for CubeSat payloads as auxiliary payloads on planned missions. The full announcement is published on-line at:

http://www.nasa.gov/pdf/430539main_CubeSat_Launch_Initiative_Announcement_7_30_2010.pdf

An earlier NASA announcement did not solicit enough proposals to fill the launch opportunities. NASA noted that, "If there is adequate response from the CubeSat projects, the initiative could be continued on future flight opportunities.

Successful CubeSat proposal teams will be required to enter in a collaborative Agreement to support the pilot project. NASA will provide integration and other services as necessary to complete the launch activity. Participation in the pilot program will be contingent upon selection by NASA and negotiation of an appropriate Agreement between NASA and the collaborator. Collaborators may be required to provide partial reimbursement of the launch and integration costs of up to $30,000 per 1U Cube associated with their participation in the pilot project.

Investigations supported by CubeSat payloads proposed for the pilot project must address an aspect of science, exploration, technology development, education, or operations encompassed by NASA's strategic goals and outcomes as identified in the NASA Strategic Plan and/or Education Strategic Coordination Framework.

Selection is anticipated by January 31, 2011. Consult the NASA document at the URL above for all project proposal requirements.

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-227.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 227.06
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.06

+ Congratulations are in order to George, WA5KBH for being awarded his Worked All States - Satellite #319. George got his 50th state when he worked Adrian, AA5UK/KH6, during his April trip to Hawaii. George has also been awarded his VUCC Satellite award for 350 grids.

+ The next Hudson Valley Satcom Net will meet on the air and on Echolink on August 19, at 8PM EDT (2400 UTC). If you are within range of the Mt. Beacon ARC repeater the net will be on 146.970. The Echolink node is N2EYH-L. More info; http://www.hvsatcom.org. (via Stu, WA2BSS)

+ The British Amateur Television Club (BATC) have produced a short video showing the people and equipment in the web streaming of the AMSAT-UK Colloquium, see:
http://www.southgatearc.org/news/august2010/behind_the_scenes.htm
(via Trevor, M5AKA)

+ Drew, KO4MA has posted a short video with my phone illustrating the differences in received performance when your portable FM satellite antenna can be twisted to track downlink polarity. This was recorded at the tail end of an AO-51 pass, with the satellite below 10 degrees. The downlink is received with the UHF half of an Arrow, 10 feet of high quality coax, and a Yaesu FT-817. Watch the video at:
http://www.youtube.com/watch?v=XTqjQ9xIQQE

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-227.07
For Hams Who Like Science: Einstein@Home

AMSAT News Service Bulletin 227.07
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.07

SpaceDaily.com this week published a story about three citizen scientists, an American couple and a German, have discovered a new radio pulsar hidden in data gathered by the Arecibo Observatory. This is the first deep-space discovery by Einstein@Home, which uses donated time from the home and office computers of 250,000 volunteers from 192 different countries. Einstein@Home is based on SETI@Home, a similar program looking for signs of extraterrestrial life in data from the radio telescope at Arecibo Observatory.

Einstein@Home describes their project on their home page: http://www.einsteinathome.org. "Einstein suggested that we live in a universe full of gravitational waves. He proposed that exploding stars, colliding black holes and other violent events create waves that alter space and time. We have not detected these waves yet because it requires tools sensitive enough to measure very small effects. It's like trying to detect a change in the distance from the earth to the sun equal to the width of an atom. Technology has caught up with Einstein's prediction. We now have detectors sensitive enough to see these waves."

Einstein@Home uses private computers to process data. Private computer owners can download software onto their computers that receives data from a central server. The computers process the data when they are not being used for other things, like email or word processing. Then, the computers send the processed data back to the server and can get more to analyze. The site explains Einstein@Home doesn't affect how computers perform and you can stop it any time.

Imagine finding a new pulsar, such as this week's PSR J2007+2722 discovery, a neutron star rotating 41 times per second located in the Milky Way, approximately 17,000 light years from Earth in the constellation Vulpecula ... while waiting for the next satellite pass or for 10 meters to open.

The full story at SpaceDaily.com can be found on-line at: http://tinyurl.com/29ggsb8

[ANS thanks Einstein@Home and SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

## 69. WSR-226 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-08-15 14:39:51 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000a01cb3c87$ac10ba20$04322e60$@net>
Source record: 372
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-226.S1
WSR 226 Part 1 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S1
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-226.S2
WSR 226 Part 2 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S2
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1: Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====

Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====

CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442

Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF

Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-226.S3
WSR 226 Part 3 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S3
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-226.S4
WSR 226 Part 4 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S4
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]

=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 70. WSR-235 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-08-25 17:02:20 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002601cb4477$3c8aafb0$b5a00f10$@net>
Source record: 373
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-235.S1
WSR 235 Part 1 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S1
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-235.S2
WSR 235 Part 2 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S2
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1: Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====

Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====

CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442

Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF

Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-235.S3
WSR 235 Part 3 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S3
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-235.S4
WSR 235 Part 4 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S4
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]

=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 71. ANS-234 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-08-25 17:25:09 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002701cb447a$72717c50$575474f0$@net>
Source record: 374
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-234

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Election Reminder
* ARRISSat-1 Update
* Symposium Call for Papers
* AO-51 Update
* ARISS STATUS
* Satellite Shorts

SB SAT @ AMSAT $ANS-234.01
Election Reminder

AMSAT News Service Bulletin 234.01
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.01

Just another nag that the AMSAT election for members of the Board of Directors is in progress. The end of the summer, and the start of school is upon us. Still, if you haven't gotten around to it, take a few minutes to vote. The deadline will be here in a month. Obviously it is important as a member to vote, but it is also important for Board members to receive your input in this way.

73s,

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS Thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-234.02
ARISSat-1 Update

AMSAT News Service Bulletin 234.02
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.02

We are now manifested on Progress 41P to get ARISSat to the ISS. The current timeline has the launch in January 2011. Four ARISSat satellites have been assembled in Orlando. The two Russian flight units are assembled, electronics are undergoing operational tests, software is close to being the final version and we expect to have the satellite complete and ready for vibration tests next week. We don't have a date for the vibration test yet, but are working to get one in the next few weeks.

NASA has been very instrumental in getting us an export license, arranging for transportation to Russia and helping clarify how the satellite will be attached to the Progress vessel. We plan on shipping the two satellites to Russia in September, to give them time to install the Kursk experiment, test their battery with the satellite and do additional tests before shipping to Baikonur for launch.

Gould, WA4SXM, AMSAT ARISSat-1 Project Manager

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-234.03
Symposium Call for Papers

AMSAT News Service Bulletin 234.03
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.03

It's already August 1 and the September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is approaching faster than ever! The abstracts and some completed papers have arrived - thank you. For everyone else - we need to get busier ... please!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted an author's guide on the AMSAT.org web page: http://tinyurl.com/2djjnmx

The 2010 AMSAT Space Symposium and Annual Meeting will be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-234.04
AO-51 Update

AMSAT News Service Bulletin 234.04
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.04

Eclipses Cause Short Term Changes to AO-51 Schedule

AO-51 Command Team member, Mark N8MH noted this week that AO-51 is still in eclipses until the last week of August. The satellite will be back in 100% sun until the end of December after this time. That means the Command Team should be able keep AO-51 transmitting all the time. In fact, they will need to do this in order to keep temperatures down!

In recent days the Command Team had to resort to shutting down the voice repeater in order to grab some telemetry files from the bird. This was very important as we are nearing the end of the eclipse period and was a unique opportunity to collect good data for current use and for future reference for AO-51 Operations.

Recently AO-51 has been automatically turning itself OFF and back ON because of the power budget. Users see this more often as it first comes out of eclipse and as it begins to enter eclipse. The Command Team will continue to fine tune this, but the goal is to keep AO-51 transmitting when there is enough power--without having the bird shutdown until manually commanded back ON by one of the command team members.

Starting January 2011, we won't see much of a break from the eclipse periods for a long, long time (there is one short window of full sun, but it's about 2 weeks long in late Feb/early March 2011). The command team has been using the recent eclipse period to learn how to become more efficient in the use of the power management code on board. This allows us to get the most "bang for the buck" out of the available power. It's pretty complex and versatile. We've learned a tremendous amount this eclipse period, but still have more to learn in the future.

[ANS thanks AO-51 Command Team member, Mark N8MH for the above information]

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SB SAT @ AMSAT $ANS-234.05
ARISS Status Report

AMSAT News Service Bulletin 234.05
From AMSAT HQ SILVER SPRING, MD.
August 16, 2010
To All RADIO AMATEURS
BID: $ANS-234.05

1. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with the DaVinci Science Center in Allentown, Pennsylvania. The Center has integrated this activity into its Summer Camp Program for 2010. Students have learned about space through lessons from the NASA Goddard Space Flight Center Education Office and Astronaut Terry Hart is expected to give presentations. The Delaware-Lehigh Amateur Radio Club has provided instruction on Amateur Radio, how it works, what it is and its uses, how the ARISS radio systems work, the international ham radio team, satellite tracking, radio wave propagation and the organizations that sponsor ARISS. The club will also provide VHF demonstrations and multi-media presentations to the group which will enhance the center's 200 hands-on exhibits that promote the understanding of science and technology. Due to ISS Problems, This has been postponed, however, keep informed as this can change before this ANS is published.

2. QST Covers ARISS

The American Radio Relay League (ARRL) September issue of QST carried an item in the "Inside HQ" column about how NASA ISS crew members participated in one or more ARISS educational activities per week during the first half of 2010. The ARRL monthly journal has a circulation of 150,000.

3. ISS Ham Debrief Scheduled

An Amateur Radio on the International Space Station (ARISS) debrief session has been scheduled with Expedition 22/23 astronaut Soichi Noguchi, KD5TVP on Tuesday, August 17. The feedback provided on the radio system

and school contacts will help the ARISS program update its operations.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-234.06
Satellite Shorts

AMSAT News Service Bulletin 234.06
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.06

SA-AMSAT Reports Plans for Sumbandilasat SO-67 Return to Service

South Africa AMSAT (SA-AMSAT) is slowly adding additional operational time for Sumbandilasat SO-67. On their web page they report that the ground control station will start slowly with the amateur payload and observe if the satellite remains stable and then gradually add more operating time. The current SO-67 schedule for operations over South Africa and Europe can be found on their web page at: http://www.amsatsa.org.za/

The PTT of the transmitter now STAYS ON for the duration of the payload activation (i.e. 15 min), regardless of a valid "transponder" tone received. Please leave a 3 second gap between overs.

---

AMSAT Awards

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for these stations earning AMSAT awards during July and August.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

George Jounakros, K2KVI
Johnathon Ballard, KI4UKF
Stephen Ponder, N5WBI
Bob Herrell, AJ5C
Jason Brisco, N5NBJ

The following have earned the AMSAT Communications Achievement Award.
Stephen Rish, K8SAR #516

The following have earned the South Africa AMSAT Communications Achievement Award
John Neeley, W6ZKH #US148

To see all the awards visit http://www.amsat.org

---

Japan's Venus Mission Getting Close

The mission that launched UNITEC-1, Amateur Radio's first inter-
planetary probe, the Venus Climate Orbiter also known as Akatsuki
remains healthy and is nearing the planet. The 5.8 GHz amateur radio
beacon from UNITEC-1 was last heard only two days outbound from Earth.

Akatsuki, bristling with cameras, will circle the exotic planet's
equator in an elliptical orbit for at least 2 years, monitoring the
atmosphere at different altitudes using various wavelengths (IR, UV,
and visible). With this data and data from the spacecraft's radio
dish, scientists will reconstruct a 3D model of the atmosphere's
structure and dynamics.

The instruments will also scrutinize the planet's surface for volcanic
activity. In addition, Akatsuki's Lightning and Airglow Camera will
hunt for lightning in order to settle a longstanding debate about how
is Venusian lightning generated in a dry atmosphere?

The full story can be found on-line at NASA Science News
http://science.nasa.gov/science-news/science-at-nasa/2010/16aug_vco/

[ANS thanks Everyone for the above information]

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In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors to
AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 72. ANS-241 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-08-29 01:18:29 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001901cb4718$120a6750$361f35f0$@net>
Source record: 375
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-241

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* It's Time to Register for the 2010 AMSAT Symposium
* Exciting Papers and Presentations Rolling In
* Symposium Poster Presentation & Demonstration Opportunity
* David Taylor W8AAS Appointed AMSAT US Delegate to ARISS-International
* AMSAT at Shelby, NC Hamfest Labor Day Weekend
* AMSAT Invited for Public Outreach at National Air & Space Museum
* New AO-51 Schedule As Satellite Enters Full Sun
* Satellite Shorts From All Over
* European Student Competition 'In The Can'

SB SAT @ AMSAT $ANS-241.01
It's Time to Register for the 2010 AMSAT Symposium

AMSAT News Service Bulletin 241.01
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.01

It is time to register for the 2010 AMSAT Space Symposium and General meeting. You can register on-line at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Your conference fee includes entrance to the Symposium, refreshments and a copy of the 2010 Symposium Proceedings:
$40.00 per person before 15 September 2010
$45.00 from 21 September through 5 October
Online registration closes 5 October at Midnight.
Registration at the door will be $50.00.

The Saturday Night Banquet is the highlight of the Space Symposium. Join us for great food, major announcements and the traditional banquet

prize awards. Saturday Evening Banquet $45.00 per person.

The keynote speaker at the banquet will be Dr. Albert Stebbins, a theoretical astrophysicist working with the Sloan Digital Sky Survey in the Fermilab Theoretical Astrophysics Group.

AMSAT Area Coordinators typically gather to exchange ideas and techniques for supporting AMSAT members and promoting amateur satellite operations. Sunday Morning Area Coordinator's Breakfast:
$15.00 per person

Symposium Hotel Information:
---
The Chicago/Elk Grove Holiday Inn is located west of O'Hare Airport at 1000 Busse Road, Elk Grove Village, IL 60007. Telephone 1-847-437-6010. The registration code for the discount rate of $79.00 per night is AMS. The direct link to the www.holidayinn.com hotel web page is:
http://tinyurl.com/2aptoeu
You can also reach this page from the Symposium web page at:
http://www.amsat.org/amsat-new/symposium/2010/Hotel.php

Flight & Airport Information:
---
Chicago-O'Hare International Airport is the closest to the Chicago/Elk Grove Holiday Inn Hotel. The hotel offers free hourly shuttle service to and from O'Hare Airport. Call the hotel upon arrival to let them know to come pick you up.

Note that Chicago-Midway Airport is approximately 40 miles from the hotel and will require commuting or a $22.00 Shuttle fee. O'Hare Airport is served by all major air carriers.

Getting there by car:
The hotel address is 1000 Busse Road, Elk Grove Village, IL 60007.
A map link is included on the hotel web page.
The GPS coordinates are 42° 00' 37.30" N 87° 57' 36.5" W.

Sunday Afternoon Tour
---
At the conclusion of the Symposium activities you are invited to participate in a tour of the Tevatron at the Fermi National Accelerator Laboratory on Sunday. Part of the tour will include a tour of the multi-megawatt RF portions of the particle accelerator as well as a tour of the new Super Conducting RF Test Facility. The Symposium registration form includes a place to indicate whether you can help with the car pools for travel to FermiLab and back to the hotel. The planned start time for the FermiLab tour will be 12 Noon.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-241.02
Exciting Papers and Presentations Rolling In

AMSAT News Service Bulletin 241.02
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.02

As of this week the 2010 Symposium Committee has had several exciting offers for papers and presentations. Topics that have arrived include the list below.

Exploration and definition of AMSAT's opportunities to grow our outreach in the educational areas:
+ ARISS and Education
+ ARISS Operation Update
+ Education Paradigm Shift for AMSAT to Support Subsidized Launch Opportunities
+ University of Louisiana Satellite Program

Get up-to-date on AMSAT's next platform in space:
+ Assembling ARISSat
+ ARISSatTLM, a telemetry display program for ARISSat-1
+ Software Radio Technology on ARISSat-1
+ ARISSat-1 Overview
+ ARISSat-1 Power System
+ BPSK-1000 format for ARISSat-1

Discussion of AMSAT's future satellite technology:
+ Elmersat -- A Modest Proposal for Future Satellites
+ Using ham radio satellites to distribute amateur radio news in both voice and data formats
+ Characteristics of simulated data multicasts transmitted over K3IO's proposed GEO-Eagle communications platform
+ Proposal for Digital Television Aboard the ISS

Updates and information of current AMSAT topics:
+ ITAR Legal Update
+ AMSAT-FOX
+ SUNY-AMSAT System Development
+ AO-51 Battery Capacity and Spin Trends
+ South Africa AMSAT Update
+ AMSAT Publications - Future Direction for the Journal, News Service, & Web

Building up your satellite station:
+ Flex Radio V/U Module - 2m/70cm full duplex transverter module for the Flex 5000
+ Low Cost, Lightweight Homebrew Dish Construction

Teaching others how we do it:
+ How to Work the FM Ham Satellites With Your Handheld Radio
+ Successful Hamfest Demonstrations

Authors are reminded to send in your completed papers as soon as possible. Presentations should be in Powerpoint format. Bring your presentation loaded on a thumb drive which can be loaded into the projection system prior to your speaking time slot.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-241.03
Symposium Poster Presentation & Demonstration Opportunity

AMSAT News Service Bulletin 241.03
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.03

The poster presentation and demonstration area proved to be a popular place to visit at the Baltimore Symposium. The 2010 Symposium Committee plans to duplicate this success at the Chicago Symposium.

So, if you don't have time to generate a paper or presentation please consider setting up a Poster Presentation or demonstration. We had the opportunity to view actual CubeSats, PPod launchers, ARISSat-1 proto-types.

If you plan on setting up a Poster or demonstration please contact the 2010 Symposium Proceedings Editor, JoAnne Maenpaa K9JKM via e-mail at k9jkm@amsat.org. We'll reserve table space for you!

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-241.04
David Taylor W8AAS Appointed AMSAT's US Delegate to ARISS-International

AMSAT News Service Bulletin 241.04
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.04

AMSAT President Barry Baines, WD4ASW has appointed David Taylor, W8AAS of Columbia, MD as AMSAT's US delegate to ARISS-International (ARISS-I). Dave replaces Barry Baines, WD4ASW who was holding the position temporarily following the resignation of Will Marchant, WC6ROL in 2009. ARISS is 'Amateur Radio on the International Space Station'.

Barry noted, "I am pleased to appoint Dave, W8AAS as our new ARISS-International delegate. Dave has extensive experience with the ARISS program, having participated as a trainer and procedure writer, ground station operator, school contact mentor and operations coordinator.

His extensive knowledge of day-to-day operations of ARISS coupled with his exposure to the workings of ARISS-I as an observer as well as supporting the efforts of past AMSAT human spaceflight activities makes him well qualified to serve as AMSAT's representative and advocate for amateur radio in space."

Dave was first licensed in 1970 and has been involved with SAREX/ARISS since 2000. He holds an Extra Class amateur radio license.

ARISS-I is a working group consisting of a consortium of national amateur radio organizations and AMSAT organizations of the host countries represented on the International Space Station. ARISS-I serves as the 'unified voice of amateur radio' in working with the space agencies that manage the ISS. Since ARISS is international in scope, the team coordinates locally with their respective space agency (e.g. ESA, NASA, JAXA, CSA, and the Russian Space Agency) and as an international team through ARISS working group meetings, teleconferences and through electronic mail.

In North America, the US delegates are Rosalie White, K1STO (appointed by the ARRL) and David Taylor, W8AAS (appointed by AMSAT). The Canadian delegates are Daniel Lamoureux, VE2KA (appointed by Radio Amateurs of Canada) and Maurice-Andr&#65533; Vigneault, VE3VIG (appointed by AMSAT). In addition there are four European delegates, two Japanese delegates, and two Russian delegates. The Chairman of ARRIS-I is Gaston Bertels, ON4WF.

Information on the activities of ARISS can be found at:
http://www.rac.ca/ariss/oindex.htm

[ANS thanks AMSAT President Barry Baines, WD4ASW and ARISS-International for the above information]

/EX

SB SAT @ AMSAT $ANS-241.05
AMSAT at Shelby, NC Hamfest Labor Day Weekend

AMSAT News Service Bulletin 241.05
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.05

AMSAT Area Coordinator Bob Felt, KB5YZG of Hendersonville, NC and AMSAT President Barry Baines, WD4ASW of Westborough, MA will be representing AMSAT at the Shelby Hamfest on Saturday and Sunday, September 4-5. The Hamfest is at the Dallas, NC Park (1303 Dallas-Cherryville Highway, Dallas, NC 28034) adjacent to Gastonia College. Hamfest details may be found at http://www.shelbyhamfest.com.

Along with the traditional AMSAT booth, there is an AMSAT Forum scheduled for 0920-1020 on Saturday morning in Room B of the main

commercial building. AMSAT President Barry Baines, WD4ASW will provide an update on AMSAT activities, including an overview of ARISSat-1. Bob and Barry also hope to do some satellite contacts from the hamfest as well.

AMSAT members who are attending the Shelby Hamfest are encouraged to stop by the AMSAT booth, which is expected to be positioned in the main commercial building. Any AMSAT member interested in helping to man the AMSAT booth are encouraged to contact Bob Felt, KB5YZG (kb5yzg@amsat.org). Shelby is always a busy weekend and additional volunteers are always welcome.

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-241.06
AMSAT Invited for Public Outreach at National Air & Space Museum

AMSAT News Service Bulletin 241.06
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.06

Samudra Haque, N3RDX noted an opportunity to volunteer for an AMSAT outreach activities, being organized by the National Air and Space Museum in Washington, DC. Details include:

Event: Hispanic Heritage Month Family day - Argentina in Air and Space
Location: National Air and Space Museum, Washington, DC
>Date: Saturday, October 16, 2010
Time: 10 AM - 3 PM

Samudra is volunteering to organize AMSAT's participation for the event.

Please contact him through e-mail (n3rdx@amsat.org) if you are interested and able to participate in any form.

NASM is looking for AMSAT members who would be interested in talking to the visitors about satellites. Because the focus of the day is Argentina, we are particularly interested in people with expertise in Argentinean satellites. Bonus points for members how can discuss Pehuensat-1 because Pablo de Leon, who was the payload manager, will be a featured speaker at the event.

AMSAT members would set-up tables with equipment, posters, and other items of interest to visitors. These tables would be staffed throughout the day by AMSAT members. You are welcome to volunteer for a couple of hours or the whole day. Free parking will be provided all, and lunch will be provided for people who volunteer the whole day.

Samudra will need to know:
+ Can you volunteer any exhibition/display resources (pictures,
posters, etc.) ?
+ Can you volunteer your time on October 16, 2010 for any portion?
+ Can you provide any presentation materials relevant to Argentina
in Air and Space?
+ Will you require transportation? etc. etc.

[ANS thanks Samudra Haque, N3RDX for the above information]

/EX

SB SAT @ AMSAT $ANS-241.07
New AO-51 Schedule As Satellite Enters Full Sun

AMSAT News Service Bulletin 241.07
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.07

AO-51 Command Team, Mark Hammond, N8MH said this week that according
to projections, the next 100% illumination period for AO-51 has begun.
Hopefully for the next week or two AO-51 can run both transmitters ON
at reasonable power. The PL tone isn't needed (and hasn't been for
the last few weeks).

FM Digital PBBS, U
Uplink: N/A
Downlink: 435.150 Mhz FM

FM Repeater, V/U
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM

Even though AO-51 "sees sunlight" all the time, it doesn't "see" the
sun equally throughout an orbit. So, the Operations Team is going to
keep the power management software running in hopes they can optimize
the transmitter power output and keep the battery temperatures down.

The way it is currently configured, AO-51 can run in one of three
states, depending on available battery power:
1) HIGH 435.300 at 550 mW and 435.150 at 420 mW
2) MEDIUM 435.300 at 420 mW and 435.150 at 300 mW
3) LOW which currently sets both transmitters effectively to OFF

It is very likely that users will see the transmitter power going up
and down some as the battery voltage goes up and down. AO-51 Operator
hope the power changes do not occur too often, and adjustments will be
made after collecting some telemetry over the next few days. The goal
has always been to keep it ON and useable as much as possible, and
the Command Team will do their best to continue that tradition.

Activity reports over the next few weeks to http://oscar.dcarr.org/
(or to n8mh AT amsat.org if AO-51 appears to be OFF) will be very

much appreciated.

And finally--telemetry files (KISS format preferred) from around the world will be greatly appreciated for the next few weeks!

[ANS thanks Mark Hammond, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-241.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 241.08
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.08

+ SA AMSAT has introduced SAT Network, a regular discussion on satellites. The first SAT Network will discuss the payload options for the proposed SA AMSAT payload. It will be on the air on Sunday 29 August 2010 at 19:30. Marten, ZS6ZY, will relay on 3718 kHz and Chris, ZS6FCS, will take care of Echolink and the Webcast. (SA-Amsat http://www.amsatsa.org.za/)

+ A video showing reception of the first signals by the SUPSI team from the Amateur Radio CubeSat TI-SAT HB9DE, launched July 12, is available on YouTube. See: http://tinyurl.com/22keqkz

+ Monitor the Copenhagen Suborbitals webpage for the countdown of an amateur built rocket launch on August 30. See: http://www.copenhagensuborbitals.com/index.php

+ Two videos on YouTube video show the concept for a CubeSat propulsion system using plasma electrolysis of water. This prototype shows that thrust can be produced by plasma electrolysis - it burns water, so to speak. See: http://tinyurl.com/2csky34

+ The wakeup song has been a part of the space program since the days of the Apollo missions, and now NASA is giving you two chances to be a part of this history! We need your help selecting wakeup songs to be played during the final missions of the Space Shuttle Program. See: https://songcontest.nasa.gov/home.aspx

+ Fabiano CT7ABD/PY5RX, celebrated his August 25 birthday by having the crew aboard the International Space Station sing Happy Birthday directly from space. Listen Audio by CT1EAT: http://www.issfanclub.com/node/28329

+ Echolink for Android - the suppliers of Echolink have developed an app for the Android phone system and it is live as of now. Details at: http://www.echolink.org/faq_android.htm

+ This time lapse footage of views of sunrise and sunset was taken by astronaut Don Pettit. See: http://tinyurl.com/39c7ylh

+ A group of 4 operators will be operating as AO1EME from IN70qk on 2-5 September. The main goal will be EME on 144 MHz, but they'll also have a 70cm. 20 el. cross yagi and plan to operate on the satellites when there is no Moon and time permits. For more information,
operation status, on-line logs, etc please visit:
http://www.vhfdx.info/burguillo.html (Gabriel, EA6VQ)

+ The next "Hudson Valley Satcom" net date is Thursday Sept. 2 at 8PM (EDT, or 2400 UTC), on the improved "146.97" MBARC Repeater. (Pl. 100; down 600); with an echolink node of: N2EYH-L More info:
http:www.hvsatcom.org/ (Stu WA2BSS)

+ ESA astronaut Paolo Nespoli, IZ0JPA has been scheduled for an ARISS refresher course on September 3, during which he will be briefed on procedures to install the VHF Ericsson amateur radio system in the Columbus module. Nespoli is slated to fly with Expedition 26 in November 2010.

+ Clint Bradford, K6LCS and Gordon West WB6NOA ran a very successful amateur satellite operations demonstration at the Orange County Fair earlier this month. This has been written up in the ARRL Southwestern Division's newsletter available on-line at:
http://web.me.com/clintbradford/k6lcs/Docs_files/OCFAIR-2010.pdf
Clint reports that CQ Magazine has also accepted their article pro-posal. Watch for it in an upcoming issue!

+ MMSSTV is an easy to use SSTV program for your PC which will allow you to receive and decode the SSTV signals from the ISS. Makoto Mori, JE3HHT has released version 1.12. MMSSTV can be downloaded from
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-241.09
European Student Competition 'In The Can'

AMSAT News Service Bulletin 241.09
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.09

A story appearing at SpaceMart.com section of SpaceDaily.com (http://tinyurl.com/32lxyjo) on August 27 described the success of the first ESA CanSat competition.

High school students from different ESA Member States were able to watch their own 'satellites' soar into the sky aboard suborbital rock-ets during the first European CanSat competition, held at the Andoya

Rocket Range in Norway.

The CanSat competition, organised by ESA's Education Office and the Norwegian Centre for Space-related Education (NAROM), was open to teams of at least four students, assisted by a teacher or tutor.

The selected teams had to build their own small CanSat 'satellite' in six months, with each team developing an experiment that would fit inside a 350 ml soft drink can. These investigations ranged from calculating variations in Earth's magnetic field and tracking the Sun, to measuring solar radiation and levels of carbon dioxide.

The most exciting day was 17 August, when the students were able to watch five Intruder rockets launch their CanSats from Skarsteindalen, a former military facility close to Andoya Rocket Range. The mini-payloads soared to an altitude of 1 km before parachuting back to Earth.

The culmination of the competition was the prize ceremony on 18 August, when the expert jury announced the results of its evaluation of the projects and selected the three winning teams:
+ The bronze award went to the Brussels Vikings team from Sint-Pieterscollege Jette in Belgium.
+ The silver award went to the Irish team Triailliu from Laurel Hill School.
+ The gold award winners were 'Team Eclipse' from St Paul's School in London, United Kingdom.

A CanSat is a simulation of a real satellite, integrated within the volume and shape of a regular soft drink can. CanSats offer unique opportunities for students to experience their first real space-related project. The participating countries in the first competition were Belgium, Czech Republic, Denmark, Greece, Italy, Ireland, Norway, Spain, Sweden and United Kingdom.

The European CanSat competition is one of many ESA hands-on initiatives to inspire young people to follow a career in science or engineering. In this way, it is hoped to ensure the availability of a highly qualified
work force in the space industry of the future.

One of the primary objectives of the competition is to promote the CanSat
concept in ESA Member States. Similar competitions already exist in some

ESA Member States and ESA is seeking to support additional CanSat activities from 2011.

[ANS thanks SpaceMart.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office. And, with that please recall the young ham who went to work in an office. While the IT department is setting up his computer they tell him to think of a password. The fella says his password will be 'mickey goofy minnie pluto donald and Washington'. The IT guy asks why in the world did he pick that password? He replied, "You told me it had to be five characters with a capitol!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 73. WSR-242 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-08-30 15:24:42 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001101cb4857$6e90d050$4bb270f0$@net>
Source record: 376
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-242.S1
WSR 242 Part 1 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S1
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-242.S2
WSR 242 Part 2 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S2
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1: Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====

Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====

CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442

Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF

Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-242.S3
WSR 242 Part 3 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S3
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====

UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-242.S4
WSR 242 Part 4 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S4
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]

=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 74. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-09-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1283320800@panix.com>
Source record: 377
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 75. ANS-248 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-09-05 14:34:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000e01cb4d07$7b4ec220$71ec4660$@net>
Source record: 378
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-248

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Reminder: Deadline to Return Board of Directors Ballots is Sept. 15
* Reminder: Important Symposium Dates Approaching
* ISRO Success Inspires India University Satellite Development
* Satellite Shorts From All Over
* ARISS Status - 30 August 2010

SB SAT @ AMSAT $ANS-248.01
Reminder: Deadline to Return Board of Directors Ballots is Sept. 15

AMSAT News Service Bulletin 248.01
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.01

AMSAT Corporate Secretary, Alan Biddle WA4SCA reminds all members that the deadline for submitting your ballot is rapidly approaching. In order to be counted, they must be received at the AMSAT office by the close of business on Wednesday, September 15th. The results will be announced as quickly as possible, with the new directors assuming their position immediately upon the formal announcement of the results. As always, this very direct feedback is essential for AMSAT to continue to represent its membership!

[ANS thanks AMSAT Corporate Secretary, Alan Biddle WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-248.02
Reminder: Important Symposium Dates Approaching

AMSAT News Service Bulletin 248.02
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.02

Two important deadlines are approaching for AMSAT's 2010 Space Symposium and Annual General Meeting being held on Friday, October 8 through Sunday, October 10.

EARLY SYMPOSIUM REGISTRATION EXPIRES SEPTEMBER 15
---
The early Symposium conference fee of $40 expires on September 15. Your conference fee includes entrance to the Symposium, refreshments and a copy of the 2010 Symposium Proceedings:
$40.00 per person before 15 September 2010
$45.00 from 21 September through 5 October
Online registration closes 5 October at Midnight.
Registration at the door will be $50.00.

You can register for the Symposium on-line at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

RESERVED ROOMS SPECIAL RATE EXPIRES ON SEPTEMBER 24
---
The block of reserved hotel rooms at the Chicago/Elk Grove Holiday Inn is available until September 24. This hotel is located west of O'Hare Airport at 1000 Busse Road, Elk Grove Village, IL 60007.

The registration code for the discount rate of $79.00 per night is AMS. The direct link to the www.holidayinn.com hotel web page is: http://tinyurl.com/2aptoeu You can also reach this page from the Symposium web page at:
http://www.amsat.org/amsat-new/symposium/2010/Hotel.php
The telephone number at the hotel is 1-847-437-6010

FLIGHT & AIRPORT INFORMATION
---
Chicago-O'Hare International Airport is the closest to the Chicago/ Elk Grove Holiday Inn Hotel. The hotel offers free hourly shuttle service to and from O'Hare Airport. Call the hotel upon arrival to let them know to come pick you up.

Caution! Several cheap flights to/from Chicago go to Midway Airport. Note that Chicago-Midway Airport is approximately 40 miles from the hotel and will require commuting or a $22.00 Shuttle fee. O'Hare Airport is served by all major air carriers.

Getting there by car:
The hotel address is 1000 Busse Road, Elk Grove Village, IL 60007.
A map link is included on the hotel web page.
The GPS coordinates are 42° 00' 37.30" N 87° 57' 36.5" W.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-248.03
ISRO Success Inspires India University Satellite Development

AMSAT News Service Bulletin 248.03
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.03

An August 26 story, "Indian universities aspire to launch student satellites", published on Calcutta News.Net carries a news item reporting that, "Around 25 universities are aspiring to launch satellites built by their students but the Indian space agency says its hands are full as it has to launch four more student satellites by the end of next year.

University students across India are clearly ignited by the successful launch last month by the Indian Space Research Organisation (ISRO) of the first Pico-satellite (StudSat) built by about 40 under-graduates from four engineering colleges from Karnataka and three from Andhra Pradesh.

'We have received around 25 proposals requesting us to guide, support and launch the satellites made by the students. Some of them have begun working on the proposals,' the project director of small satellites at ISRO's Satellite Centre (ISAC) Raghav Murthy told reporters on the margins of the second space exhibition and conference here.

Murthy declined to name the universities.

ISRO appears in no mood to take up new launches anytime soon.

'We want to launch the four more student satellites which are already in the making. We expect that all the launches will be completed by the end of 2011,' Murthy said.

The four satellites are being made by students of Indian Institutes of Technology Kanpur and Bombay (one each) and Tamil Nadu-based Satyabhama University and SRM University (two jointly).

The IIT-K satellite, called Jugnu, weighs three kg and carries a camera to study the near infrared region while IIT-B students have named their 3.5 kg product Pratham to measure the total electron content in the ionosphere.

The Satyabhama and SRM students are building two satellites weighing up to seven kilograms each to measure the carbon dioxide content in the atmosphere of the lower earth orbit.

The four satellites are being built by the B. Tech students, Murthy said.

The 40-kg Anusat readied by the students of Anna University in Chennai was the first student satellite launched in April 2009. It carried an amateur radio store and advanced communications system.

The Studsat launched in July this year is said to be 80 percent successful
in achieving its objectives.

'Building a satellite is educating students on space technology. It is also an inter-disciplinary study of physics, mechanics, control engineering,
communications, computer science,' Murthy said.

ISRO provides guidance, consultancy, support, training and free launch services to the students.

Putting together a satellite costs up to Rs.1 crore (Rs. 10 million) which
is funded by the respective universities/institutiuons.

Original story is published at: http://www.calcuttanews.net/story/677323

[ANS thanks Calcutta News.Net for the above information]

/EX

SB SAT @ AMSAT $ANS-248.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 248.04
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.04

+ An online video report of space related activities is available from UniverseToday.com:
http://www.universetoday.com/72403/this-week-in-space-7/

+ Keep an eye on the South Africa AMSAT web page for the expanded SO-67 operating schedule which now includes North America and South America: http://www.amsatsa.org.za/

+ An article on Space-Travel.com shows a photo of the ARISS antenna built by Lou McFadin W5DID on the Station's Columbus laboratory as it is being used to track Automatic Identification System (AIS) signals from ships at sea. The full story is availale on-line at:
http://tinyurl.com/2cgkd5z

+ ARISS Public Relations Chairman, Dave, AA4KN says that ARISS has moved into the social networking realm. You are invited to visit the ARISS Facebook Page at http://tinyurl.com/2d2sfrv

+ Patrick Stoddard WD9EWK/VA7EWK has released videos showing Amateur Radio satellite operation during his recent trip to Mexico. You can view them on-line at: http://www.youtube.com/va7ewk and at:

http://tinyurl.com/27x7pdw (SouthGateARC site).

+ Congratulations to Michael, K4MOA on his successful Satellite Demonstration on August 26 at the Isothermal Amateur Radio Club in Rutherford County, NC. Michael worked 5 stations during the demo. Eighteen amateur radio operators were there for his presentation during the meeting.

+ John, LA2QAA noted that AO-7 has now operated longer this second time around compared to the first time from the 1974 era. The best way to rattle John's cage is via e-mail at: la2qaa@amsat.org

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-248.05
ARISS Status - 30 August 2010

AMSAT News Service Bulletin 248.05
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.05

1. Successful Contact with South Hobart Primary School

On Friday, August 27, South Hobart Primary School in South Hobart, Tasmania, Australia experienced a successful Amateur Radio on the International Space Station (ARISS) contact via telebridge station K6DUE in Greenbelt, Maryland. On-orbit astronaut Doug Wheelock, KF5BOC answered 7 out of 10 prepared questions before the ISS went over the horizon. ARISS member Dave Taylor stepped in to provide answers to the last few questions. The ARISS contact was incorporated into the school science curriculum through lessons covering the solar system, space exploration and the history of astronomy.

2. Crew Sends Birthday Wishes to ARISS Member

On August 25, onboard ISS crewmembers Doug Wheelock, Mikhail Kornienko, Alexander Skvortsov and Fyodor Yurchikhin sang "Happy Birthday" to ARISS

member Fabiano Moser, CT7ABD during a general ARISS contact. A recording
of the contact may be found here: http://www.issfanclub.com/node/28329

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application

forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

## 76. Radio Meteor Obs. Bull. August 2010 Perseids

Newsgroup: rec.radio.amateur.space
Date: 2010-09-07 19:20:29 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <424d861i1j6ocl5aashdvrfhcuoqsu4pj5@4ax.com>
Source record: 379
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 205 of August 2010 (102 K) is available now as

http://www.rmob.org/rmobtext/rmob1008.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

# 77. Availables : More that 3750 Solutions manuals and Test Banks (Part 1)

Newsgroup: rec.radio.amateur.space
Date: 2010-09-21 01:06:49 UTC
From: claudeh <hclaudioblanco@gmail.com>
Message-ID: <dbc8be27-4d1b-468a-a6e5-5ea83a74e075@j2g2000vbo.googlegroups.com>
Source record: 380

List of Solutions Manuals

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contact me to : mattosbw1@gmail.com
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Solution Manual Mathematical Statistics for Economics and Business (Ron C. Mittelhammer)
Solution Manual Job Hazard Analysis (James E. Roughton & Nathan Crutchfield)
Solution Manual Managerial Issues of Enterprise Resource Planning Systems (David L. Olson)
Solution Manual Business Driven Technology (1st Ed., Haag et al.)
Solution Manual Business Driven Technology (2nd Ed., Haag et al.)
Solution Manual Operations Management : An Integrated Approach (2nd Ed., R. Dan Reid & Nada Sanders)
Solution Manual Operations Management : An Integrated Approach (3rd Ed., R. Dan Reid & Nada Sanders)
Solution Manual Operations Management (4th Ed., R. Dan Reid & Nada Sanders)
Solution Manual Commercial Banking: The Management of Risk (3rd Ed., Gup & Kolari)
Solution Manual Essential Statistics for Economics, Business and Management (Teresa Bradley)
Solution Manual Calculus for Business, Economics, and the Social and Life Sciences (8th Ed., Hoffmann & Bradley)
Solution Manual Calculus for Business, Economics, and the Social and Life Sciences (9th Ed., Hoffmann & Bradley)
Solution Manual Calculus for Business, Economics, and the Social and Life Sciences, Brief Edition (10th Ed., Hoffmann & Bradley)
Solution Manual Applied Calculus for Business, Economics, and the Social and Life Sciences, Expanded Edition (10th Ed., Hoffmann & Bradley)
Solution Manual Accounting for Governmental and Nonprofit Entities (12th Ed., Wilson & Kattelus)
Solution Manual Accounting for Governmental and Nonprofit Entities (13th Ed., Wilson & Kattelus)
Solution Manual Accounting for Governmental and Nonprofit Entities

(14th Ed., Wilson, Kattelus & Reck)
Solution Manual Accounting for Governmental and Nonprofit Entities (15th Ed., Wilson, Reck & Kattelus)
Solution Manual Accounting Theory : Text and Readings (7th Ed., Schroeder, Clark & Cathey)
Solution Manual Financial Accounting Theory and Analysis : Text Reading and Cases (8th Ed., Schroeder, Clark & Cathey)
Solution Manual Financial Accounting Theory and Analysis : Text and Cases (9th Ed., Schroeder, Clark & Cathey)
Solution Manual Financial Accounting in an Economic Context (6th Ed., Jamie Pratt)
Solution Manual Financial Accounting in an Economic Context (7th Ed., Jamie Pratt)
Solution Manual Principles of Engineering Economic Analysis (5th Ed., White, Case, Pratt)
Solution Manual Financial Accounting (Michael Jones)
Solution Manual Financial Accounting : A Valuation Emphasis (Hughes, Ayres, Hoskin)
Solution Manual Financial Accounting : A Decision-Making Approach (2nd Ed., King, Lembke & Smith)
Solution Manual Financial Accounting (4th Ed., Weygandt, Kieso & Kimmel)
Solution Manual Financial Accounting, with Annual Report (5th Ed., Weygandt, Kieso & Kimmel)
Solution Manual Financial Accounting (6th Ed., Weygandt, Kimmel & Kieso)
Solution Manual Financial Accounting (7th Ed., Weygandt, Kimmel & Kieso)
Solution Manual Financial Accounting : IFRS Edition (1st Ed., Weygandt, Kimmel & Kieso)
Solution Manual Acive Learning Edition for Financial Accounting : Tools for Business Decision Making (3rd Ed., Kimmel, Weygandt & Kieso)
Solution Manual Financial Accounting : Tools for Business Decision Making, with Annual Report (3rd Ed., Kimmel, Weygandt & Kieso)
Solution Manual Financial Accounting : Tools for Business Decision Making (4th Ed., Kimmel, Weygandt & Kieso)
Solution Manual Financial Accounting : Tools for Business Decision Making (5th Ed., Kimmel, Weygandt & Kieso)
Solution Manual Managerial Decision Modeling with Spreadsheets : Canadian Edition (1st Ed., Render, Stair, Balakrishnan & Smith)
Solution Manual Managerial Decision Modeling with Spreadsheets (1st Ed., Render, Stair, Balakrishnan)
Solution Manual Managerial Decision Modeling with Spreadsheets (2nd Ed., Balakrishnan, Render & Stair)
Solution Manual Introduction to Managerial Accounting (2nd Ed., Brewer, Garrison. Noreen)
Solution Manual Introduction to Managerial Accounting (3rd Ed., Brewer, Garrison. Noreen)
Solution Manual Introduction to Managerial Accounting (4th Ed., Brewer, Garrison. Noreen)

Solution Manual Introduction to Managerial Accounting (5th Ed., Brewer, Garrison. Noreen)
Solution Manual Managerial Accounting (Balakrishnan, Sivaramakrishnan & Sprinkle)
Solution Manual Managerial Accounting : Tools for Business Decision Making, Active Learning Edition (2nd Ed., Weygandt, Kieso & Kimmel)
Solution Manual Managerial Accounting : Tools for Business Decision Making (3rd Ed., Weygandt, Kieso & Kimmel)
Solution Manual Managerial Accounting : Tools for Business Decision Making (4th Ed., Weygandt, Kimmel & Kieso)
Solution Manual Managerial Accounting : Tools for Business Decision Making (5th Ed., Weygandt, Kimmel & Kieso)
Solution Manual Managerial Accounting : Creating Value in a Dynamic Business Environment (6th Ed., Ronald Hilton)
Solution Manual Managerial Accounting : Creating Value in a Dynamic Business Environment (7th Ed., Ronald Hilton)
Solution Manual Managerial Accounting : Creating Value in a Dynamic Business Environment (8th Ed., Ronald Hilton)
Solution Manual Managerial Accounting (2nd Ed., James Jiambalvo)
Solution Manual Managerial Accounting (3rd Ed., James Jiambalvo)
Solution Manual Managerial Accounting (4th Ed., James Jiambalvo)
Solution Manual Accounting : Tools for Business Decision Making (2nd Ed., Kimmel, Weygandt & Kieso)
Solution Manual Accounting : Tools for Business Decision Making (3rd Ed., Kimmel, Weygandt & Kieso)
Solution Manual Intermediate Accounting (4th Ed., Spiceland, Sepe & Tomassini)
Solution Manual Intermediate Accounting (5th Ed., Spiceland, Sepe, Nelson & Tomassini)
Solution Manual Intermediate Accounting (6th Ed., Spiceland, Sepe & Nelson)
Solution Manual Intermediate Accounting: Principles and Analysis (2nd Ed., Warfield, Weygandt & Kieso)
Solution Manual Intermediate Accounting (11th Ed., Kieso, Weygandt, Warfield)
Solution Manual Intermediate Accounting (12th Ed., Kieso, Weygandt, Warfield)
Solution Manual Fundamentals of Intermediate Accounting (Kieso, Weygandt, Warfield)
Solution Manual Accounting Principles (6th Ed., Weygandt, Kieso & Kimmel)
Solution Manual Accounting Principles (7th Ed., Weygandt, Kieso & Kimmel)
Solution Manual Accounting Principles (8th Ed., Weygandt, Kieso & Kimmel)
Solution Manual Accounting Principles (9th Ed., Weygandt, Kieso & Kimmel)
Solution Manual Advanced Accounting (Bline, Fischer & Skekel)
Solution Manual Advanced Accounting (2nd Ed., Jeter & Chaney)
Solution Manual Advanced Accounting (3rd Ed., Jeter & Chaney)

Solution Manual Advanced Accounting (4th Ed., Jeter & Chaney)
Solution Manual Advanced Financial Accounting (7th Ed., Richard Baker, Valdean Lembke, Thomas King, Cynthia Jeffrey)
Solution Manual Advanced Financial Accounting (8th Ed., Richard Baker, Valdean Lembke, Thomas King, Cynthia Jeffrey)
Solution Manual Project Management : A Managerial Approach (6th Ed., Meredith & Mantel)
Solution Manual Project Management : A Managerial Approach (7th Ed., Meredith & Mantel)
Solution Manual Operations Management for MBAs (3rd Ed., Meredith & Shafer)
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Solution Manual Project Management in Practice (3rd Ed., Mantel, Meredith, Shafer & Sutton)
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Solution Manual Core Concepts : Project Management in Practice (2nd Ed., Mantel, Meredith, Shafer & Sutton)
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Solution Manual Project Management Case Studies (3rd Ed., Harold Kerzner)
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Solution Manual Information Technology Project Management (3rd Ed., Jack Marchewka)
Solution Manual Core Concepts of Government and Not-for-Profit Accounting (Granof & Wardlow)
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Solution Manual Government and Not-for-Profit Accounting : Concepts and Practices (4th Ed., Granof)
Solution Manual Government and Not-for-Profit Accounting : Concepts and Practices (5th Ed., Granof)
Solution Manual Business Communication Essentials, First Canadian Edition (Bovee, Thill, Schatzman & Scribner)
Solution Manual Business Communication Essentials, Second Canadian Edition (Bovee, Thill & Scribner)
Solution Manual Business Communication Essentials (2nd Ed., Bovee & Thill & Schatzman)
Solution Manual Business Communication Essentials (3rd Ed., Bovee & Thill)
Solution Manual Business Communication Essentials (4th Ed., Bovee & Thill)
Solution Manual Business Data Communications (5th Ed., William

Stallings)
Solution Manual Business Data Communications (6th Ed., William Stallings)
Solution Manual Business Data Communications and Networking (8th Ed., FitzGerald & Dennis)
Solution Manual Business Data Communications and Networking (9th Ed., FitzGerald & Dennis)
Solution Manual Business Data Communications and Networking (10th Ed., FitzGerald & Dennis)
Solution Manual Operations Management (1st Ed., Andrew Greasley)
Solution Manual Operations Management (2nd Ed., Andrew Greasley)
Solution Manual Operations Management : Quality and Competitiveness in a Global Environment (5th Ed., Russell & Taylor)
Solution Manual Operations Management : Creating Value Along the Supply Chain (6th Ed., Russell & Taylor)
Solution Manual Auditing Cases (3rd Ed., Beasley, Buckless, Glover & Prawitt)
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Solution Manual Auditing and Assurance Services : An Intergrated Approach (11th Ed., Arens, Elder & Beasley)
Solution Manual Auditing and Assurance Services : An Intergrated Approach (12th Ed., Arens, Elder & Beasley)
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Solution Manual Management Science : The Art of Modeling with Spreadsheets (2nd Ed., Powell & Baker)
Solution Manual Management Science : The Art of Modeling with Spreadsheets, Excel 2007 Update (Powell & Baker)
Solution Manual Wiley Pathways Introduction to Database Management (Gillenson, Ponniah et al.)
Solution Manual Advanced Theory and Practice in Sport Marketing (Eric Schwarz & Jason Hunter)
Solution Manual Sport and the Media : Managing the nexus (Matthew Nicholson)
Solution Manual Sport Facility Operations Management : A Global Perspective (Eric Schwarz, Stacey Hall & Simon Shibli)
Solution Manual Sport Management : Principles and Application (Russell

Hoye, Aaron Smith, et al.)
Solution Manual International Business : The Challenge of Global Competition (10th Ed., Ball, McCulloch, Geringer, Minor & McNett)
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Solution Manual Introduction to Financial Technology (Roy Freedman)
Solution Manual Managing Innovation : New Technology, New Products, and New Services in a Global Economy (2nd Ed., John Ettlie)
Solution Manual Enterprise : Entrepreneurship and Innovation : Concepts, Contexts and Commercialization (Lowe & Marriott)
Solution Manual Strategic Management : Global Cultural Perspectives for Profit and Non-Profit Organizations (Marios Katsioloudes)
Solution Manual e-Business and e-Commerce How to Program (Harvey M. Deitel, Paul J. Deitel, Tem R. Nieto)
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Solution Manual Worldwide Destinations : The Geography of Travel and Tourism (5th Ed., Boniface & Cooper)
Solution Manual Worldwide Destinations Casebook : The Geography of Travel and Tourism (2nd Ed., Boniface & Cooper)
Solution Manual Marketing in Travel and Tourism (4th Ed., Middleton, Fyall, Morgan & Ranchhod)
Solution Manual Strategic Marketing Planning (1st Ed., C. Gilligan & R. Wilson)
Solution Manual Strategic Marketing Planning (2nd Ed., C. Gilligan & R. Wilson)
Solution Manual Strategic Marketing Management : Planning, Implementation and Control (3rd Ed., Wilson & Gilligan)
Solution Manual Marketing Communications Management : Concepts and Theories, Cases and Practices (Paul Copley)
Solution Manual Auction Theory (2nd Ed., Vijay Krishna)
Solution Manual Principles of Financial Engineering (1st Ed., Salih Neftci)
Solution Manual Principles of Financial Engineering (2nd Ed., Salih Neftci)
Solution Manual A Behavioral Approach to Asset Pricing (2nd Ed., Hersh Shefrin)
Solution Manual Managing Finance : A Socially Responsible Approach (D. Crowther)
Solution Manual Customer Relationship Management (2nd Ed., Francis Buttle)
Solution Manual Introduction to Knowledge Management : KM in Business (Groff & Jones)
Solution Manual Principles of Retailing (J. Fernie, S. Fernie & Moore)
Solution Manual Business Strategy (2nd Ed., Campbell, Stonehouse & Houston)
Solution Manual Market-Led Strategic Change (3rd Ed., Nigel Piercy)
Solution Manual Market-Led Strategic Change (4th Ed., Nigel Piercy)
Solution Manual International Hospitality Management : Concepts and cases (Alan Clarke & Wei Chen)
Solution Manual Electronic Commerce : Principles and Practice (Hossein Bidgoli)
Solution Manual Financial Management for Hospitality Decision Makers (Chris Guilding)
Solution Manual Accounting Essentials for Hospitality Managers (2nd Ed., Chris Guilding)
Solution Manual Global Business Leadership (E.S. Wibbeke)
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Solution Manual Project Finance in Theory and Practice : Designing, Structuring, and Financing Private and Public Projects (Stefano Gatti)
Solution Manual Hotel Convention Sales, Services and Operations (Pat Golden-Romero)
Solution Manual Contemporary Financial Intermediation (2nd Ed.,

Greenbaum & Thakor)
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Solution manual Maritime Security : An Introduction (Michael McNicholas)
Solution manual Contemporary Logistics (8th Ed., Paul R. Murphy, Donald Wood)
Solution manual Contemporary Logistics (9th Ed., Paul R. Murphy, Donald Wood)

- Materials Engineering :

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Solution manual Fundamentals of Modern Manufacturing : Materials, Processes, and Systems (3rd Ed., Mikell Groover)
Solution manual Fundamentals of Modern Manufacturing : Materials, Processes, and Systems (4th Ed., Mikell Groover)
Solution manual Fundamentals of Manufacturing (2nd Ed., Philip D. Rufe)
Solution manual Principles of Metal Manufacturing Processes (Beddoes & Bibby)
Solution manual Materials Science for Engineering Students (Traugott Fischer)
Solution manual Essentials of Modern Materials Science and Engineering (James Newell)
Solution manual Materials Science and Engineering : An Introduction (6th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (7th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (8th Ed., William Callister)
Solution manual Fundamentals of Materials Science and Engineering : Integrated Approach (2nd Ed., William Callister)
Solution manual Fundamentals of Materials Science and Engineering : Integrated Approach (3rd Ed., William Callister)
Solution manual Science and Design of Engineering Materials (2nd Ed., Schaffer, Saxena, et al)
Solution manual Manual of Mineral Science (23rd Ed., Cornelis Klein & Barbara Dutrow)
Solution manual Materials and Processes in Manufacturing (9th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual DeGarmo's Materials and Processes in Manufacturing

(10th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual Foundations of Materials Science and Engineering (3rd Ed, Smith)
Solution manual Foundations of Materials Science and Engineering (4th Ed, Smith & Hashemi)
Solution manual Foundations of Materials Science and Engineering (5th Ed, Smith & Hashemi)
Solution manual Engineering Materials Science (Milton Ohring)
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Solution manual Mechanical Behavior of Materials (3rd Ed. Dowling)
Solution manual Mechanical Behavior of Materials (W.F. Hosford)
Solution manual Mechanical Behavior of Materials (Keith Bowman)
Solution manual Deformation and Fracture Mechanics of Engineering Materials (4th Ed., Richard Hertzberg)
Solution manual From Polymers to Plastics (A.K. van der Vegt)
Solution manual Nanoengineering of Structural, Functional and Smart Materials (Mark Schulz, Ajit Kelkar, Mannur Sundaresan)
Solution manual Principles Of Polymer Systems (5th Ed., by Ferdinand Rodriguez, Claude Cohen, Christopher Ober, Lynden Archer)
Solution manual Introduction to the Thermodynamics of Materials (4th Ed. David Gaskell)
Solution manual Structure and Properties of Engineering Materiales (5th Ed., Daniel Henkel & Alan Pense)
Solution manual Plastics : Materials and Processing (3rd Ed., Strong)
Solution manual Engineering Materials : Properties and Selection (8th Ed., Budinski)
Solution manual Engineering Materials : Properties and Selection (9th Ed., Budinski)
Solution manual Introduction to Materials Science for Engineers (6th Ed., Shackelford)
Solution manual Introduction to Materials Science for Engineers (7th Ed., Shackelford)
Solution manual Introduction to Materials Science for Engineers - International Edition (7th Ed., Shackelford)
Solution manual Creative Design of Products and Systems (Saeed Niku)
Solution manual Materials : Engineering, Science, Processing and Design (1st Ed., Michael Ashby, Hugh Shercliff & David Cebon)
Solution manual Materials : Engineering, Science, Processing and Design (2nd Ed., Michael Ashby, Hugh Shercliff & David Cebon)
Solution manual Engineering Materials Vol. 1 : An Introduction to Properties, Applications and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Engineering Materials Vol. 2 : An Introduction to Microstructures, Processing and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Materials and the Environment : Eco-informed Material Choice (Michael Ashby)
Solution manual Principles of Corrosion Engineering and Corrosion Control (Zaki Ahmad)

Solution manual Analysis and Performance of Fiber Composites (3rd Ed., Bhagwan Agarwal, Lawrence Broutman & K. Chandrashekhara)
Solution manual Basic Engineering Plasticity : An Introduction with Engineering and Manufacturing Applications (David Rees)
Solution manual Steels : Microstructure and Properties (3rd Ed. Bhadeshia & Honeycombe)
Solution manual Theory of Plasticity (3rd Ed. Jagabanduhu Chakrabarty)
Solution manual Plastics : Microstructure and Engineering Applications (3rd Ed., Nigel Mills)
Solution manual Laser Processing of Engineering Materials : Principles, Procedure and Industrial Application (John Ion)
Solution manual Sintering : Densification, Grain Growth and Microstructure (Suk-Joong Kang)
Solution manual Biomaterials : An Introduction (3rd Ed., Joon Park & R.S. Lakes)
Solution manual Biomaterials : The Intersection of Biology and Materials Science (Temenoff & Mikos)
Solution manual Biomaterials Science : An Introduction to Materials in Medicine (2nd Ed., Ratner, Hoffman, Schoen & Lemons)
Solution manual Tissue Engineering (Bernhard O. Palsson & Sangeeta N. Bhatia)
Solution manual Tissue Engineering (Clemens van Blitterswijk, et al.)
Solution manual Introduction to Materials Management (6th Ed., Arnold, Chapman & Clive)
Solution manual Fundamentals of Solid State Engineering (2nd Ed., Manijeh Razeghi)
Solution manual Smart Electronic Materials : Fundamentals and Applications (Jasprit Singh)
Solution manual Composite Materials : Science and Engineering (2nd Ed., Krishan K. Chawla)
Solution manual Laminar Composites (George Staab)
Solution manual Physical Metallurgy and Advanced Materials (7th Ed., R.E. Smallman & A.H.W. Ngan)

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contact me to : mattosbw1@gmail.com
mattosbw1(at)gmail.com

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## 80. movies

Newsgroup: rec.radio.amateur.space
Date: 2010-09-24 15:34:35 UTC
From: Balakrishnan karuppaiah <krishnan2k4@gmail.com>
Message-ID: <5e19fc25-a6d8-4f02-8c89-2f0affb1c36c@t11g2000vbc.googlegroups.com>
Source record: 383

http://123maza.com/35/songs289/

## 81. movies

Newsgroup: rec.radio.amateur.space
Date: 2010-09-25 15:34:41 UTC
From: Balakrishnan karuppaiah <krishnan2k4@gmail.com>
Message-ID: <ebcf2c62-4927-4d3d-a564-4b475be3e710@l6g2000yqb.googlegroups.com>
Source record: 384

http://123maza.com/35/songs289/

## 82. ANS-269 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-09-29 13:07:26 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001901cb5fd6$871fcf40$955f6dc0$@net>
Source record: 385
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-269

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Exciting Symposium Papers Published for 2010
* Symposium Weekend Finale - Tour Fermilab
* Resignation of AMSAT Board of Directors Member
* UT1FG/MM Satellite Operation
* NASA Selects AubieSat-1 to Launch on Rocket
* ARISS Status - 20 September 2010

SB SAT @ AMSAT $ANS-269.01
Exciting Symposium Papers Published for 2010

AMSAT News Service Bulletin 269.01
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.01

The AMSAT 2010 Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

On-line registration for the Symposium continues on-line at the AMSAT Store site:
http://www.amsat-na.com/store/SymposiumReg.php

The registration fee is $45.00 from now through 5 October. Online registration closes 5 October at Midnight. Registra-tion at the door will be $50.00

The 2010 Symposium Proceedings book has been sent to the print shop with the exciting papers presented here. Also, the speaker schedule will include topics with late breaking news and photos as ARISSat-1 completes its assembly and test phase

prior to shipment to NASA and then on to Russia.

This is what you'll find in the 2010 Proceedings:

AMSAT's Opportunities in Education
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ARISS &#65533;ducation
Rosalie White K1STO

University of Louisiana Satellite Program
Nick Pugh K5QXJ

Education Paradigm Shift for AMSAT to Support
Subsidized Launch Opportunities
Mark Spencer WA8SME

AMATEUR RADIO on the ISS - Operations Update - 2009-2010
Keith Pugh W5IU

AMSAT's Satellites
---
AO-51 Battery Capacity and Spin Trends
Mark Hammond N8MH & Colin Hurst VK5HI

ARISSat-1 Overview
Tony Monteiro AA2TX

ARISSat-1 Power System
Tony Monteiro AA2TX

Software Radio Technology on ARISSat-1
Tony Montiero AA2TX

ARISSatTLM - A Software Demodulator and Telemetry Display
Program for the ARISSat-1 Satellite
Douglas Quagliana KA2UPW

AMSAT and ITAR: Lessons Learned
Barry Baines WD4ASW

AMSAT-FOX Preview
Tony Monteiro AA2TX

BPSK-1000 format for ARISSat-1
Phil Karn KA9Q

NextGen CubeSat Proposal - Evolutionary Leveraging of
Assets and Opportunities
Alex Harvilchuck N3NP

NextGen CubeSat Student Report
Alex Harvilchuck N3NP

Satellite and Earth Station Technology
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HamTV Experiment on-board ISS
Fabio Azzarello IW8QKU E. D'Andria I�ELE,
T. Giagnacovo IZ�LTG, P. Tognolatti I�KPT

A lightweight 20 foot stressed dish for 1296 MHz EME
Marc Franco N2UO

Characteristics of simulated data multicasts transmitted
over K3IO's proposed GEO-Eagle communications platform
Paul D. Wiedemeier KE5LKY

Psat and the APRS Space Network
Bob Bruninga WB4APR

100 Watt VHF/UHF Amplifier Design and Construction
Stephen Turner K3HPA

Outreach: Getting the AMSAT Word Out
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How to Work the FM Ham Satellites With Your Handheld Radio
Clint Bradford K6LCS

Getting the AMSAT Word Out
JoAnne Maenpaa K9JKM

Successful Hamfest Satellite Demonstrations
Keith Pugh W5IU

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-269.02
Symposium Weekend Finale - Tour Fermilab

AMSAT News Service Bulletin 269.02
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.02

There will be an organized four-hour tour of the Fermilab National
Accelerator Laboratory on Sunday starting at noon.

If you do not plan to rent a car while in Chicago; the Hosting
Committee has rented a bus and will provide transportation from
the Hotel to Fermilab, then to O'Hare and back to the Hotel on
Sunday for the tour.

The cost of the bus is $25 per seat and it will provide trans-
portation to Fermilab and return according to the following
schedule:

11:00 AM Leave the Holiday Inn Elk Grove Village
12 Noon Arrive at Fermilab

3:30 PM Depart Fermilab
4:15 PM Arrive at O'hare Airport
5:00 PM Arrive back at the Holiday Inn

There will be room on the bus to bring your luggage for those who will be departing for the airport directly after the Fermilab tour.

Please email Kermit Carlson (W9XA@yahoo.com) if you would like to attend the tour and please note if you plan to use the bus transportation.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-269.03
Resignation of AMSAT Board of Directors Member

AMSAT News Service Bulletin 269.03
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.03

AMSAT BOD member Bill Ress, N6GHZ, has informed the President of AMSAT and the AMSAT Board of Directors of his resignation as a Board Member effective September 20, 2010. In his notification, Bill noted, "My business demands, currently and into the foreseeable future, are leaving me with very little extra time (and energy) to properly serve as a member of the AMSAT Board." In his notification, Bill observed that he is seeing a 'spike' in his business that requires his full attention.

AMSAT President Barry Baines, WD4ASW received Bill's resignation with regret, noting Bill's significant contributions to AMSAT as a Board Member. Barry observed, "As a member of the Board of Directors over the past two years, Bill pushed AMSAT to establish realistic and achievable goals for maintaining amateur radio in space. As chairman of the Engineering Task Force, Bill led a concerted effort to develop a space strategy that was embraced by the AMSAT Board of Directors and resulted in the decision to proceed with Project Fox. Further, Bill helped to develop the strategy that AMSAT followed in dealing with ITAR (International Traffic in Arms Regulations)-related issues. We wish Bill success in his business endeavors."

In accordance with Article II, Section 7E of the AMSAT Bylaws, Tony Monteiro, AA2TX as First Alternate will immediately assume the position of Director until the next Board election in 2011. Tony also serves as AMSAT's Vice President-Engineering.

Alan Biddle
WA4SCA

AMSAT Corporate Secretary

/EX

SB SAT @ AMSAT $ANS-269.04
UT1FG/MM Satellite Operation

AMSAT News Service Bulletin 269.04
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.04

UT1FG/MM - Capt.Yuri Bodrov will be QRV on board MV "Mottler" again from "wet squares" via all satellites FM/SSB/CW from 5 October 2010 until March 2011.

First voyage will be from Baltic Sea/Western Europe to Paranagua/Brasil .

[ANS thanks Yuri, UT1FG, for the above information]

/EX

SB SAT @ AMSAT $ANS-269.05
NASA Selects AubieSat-1 to Launch on Rocket

AMSAT News Service Bulletin 269.05
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.05

NASA selected AubieSat-1, a small satellite built by Auburn University students, to be launched on board a NASA rocket.

"We are now much closer to putting Auburn University on the map of student designed and built satellites," says Professor J-M Wersinger, Physics. "We are proud and honored to have been selected by NASA."

AubieSat-1 is participating in the CubeSat Launch Initiative. The pilot project seeks to demonstrate viable launch opportunities for CubeSat payloads during 2011 and 2012 as auxiliary payloads on planned NASA missions, as explained by Jason C. Crusan, chief technologist for Space Operations at NASA.

Long-time AMSAT member John Klingelhoeffer, WB4LNM, is a technical advisor to the Auburn satellite program. John, who retired from the satellite operator Intelsat, has been assisting the students with system and RF design topics for several years.

AubieSat-1 is an aluminum-alloy cube with 4-inch sides weighing about 2.2 pounds. It is custom built by Auburn University students The data collected by the satellite will be transmitted to the ground station in the Physics Department for analysis. The science mission is to

measure
gamma rays produced by high-altitude thunderstorms. In fall 2010 and spring 2011, AubieSat-1 will be tested at the NASA Kennedy Space Center for launch

[ANS thanks John, WB4LNM, and COSAM Covalence E-News for the above information]

/EX

SB SAT @ AMSAT $ANS-269.06
ARISS Status - 20 September 2010

AMSAT News Service Bulletin 269.06
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.06

1. Upcoming School Contact

Windsor Central School District and the Owego-Apalachin School District in New York have been scheduled for an Amateur Radio on the International
Space Station (ARISS) contact on Wednesday, September 22 at 14:21 UTC. The school districts have planned an education program with the area's Kopernik Observatory and Science Center which includes topics such as space, radio communication, satellites and rocketry. The program is planned for thirty-six middle school and high school students from each school district. Students have been chosen through a competition process

at each grade level. The final outcome of this project will be the purchase of amateur radio equipment for each school and the formation of amateur radio clubs.

2. Astronaut Shannon Walker Radios Australian Students

On Tuesday, September 14, high school students from Perth and Western Australia gathered at Curtin University of Technology to participate in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Shannon Walker, KD5DXB on the ISS. The connection was provided by telebridge station LU8YY in Argentina. Walker answered 16 space related questions prepared for her by the students and shared a few words with her husband, Australian astronaut Andy Thomas, who was in Perth to give a presentation on space exploration.

3. Utah Scouts Celebrate Centennial with ARISS Contact

On-orbit astronaut Doug Wheelock, KF5BOC conducted an Amateur Radio on the International Space Station (ARISS) contact with scouts from the Utah National Parks Council, Sector 7 in St. George, Utah on Saturday, September 18. The youth celebrated the 100th anniversary of scouting with a centennial jamboree and many completed the requirements for the Space Exploration and Radio merit badges.

4. MAI-75 Experiment Activated

The Russian ISS crew members activated the MAI-75 (Moscow Aviation Institute) experiment on Tuesday and Wednesday, September 14 - 15. The system operated Space Cam in slide show mode. Among those who captured Slow Scan Television (SSTV) images transmitted by the crew were ground stations in Asia, Europe and Africa. For more information, see: http://ariss-sstv.blogspot.com/
Images have been archived here: http://www.amsat.org/amsat/ariss/SSTV/

5. Astronaut Training Status

ESA astronaut Paolo Nespoli, IZ0JPA participated in a simulated ARISS contact with students from Scuola Media Statale "E.Galice," Civitavecchia, Rome, Italy on Tuesday, September 14. The training session was a terrestrial-based amateur radio contact using ARISS equivalent equipment. Nespoli is slated to fly withExpedition 26 in November 2010.

6. Video of ARISS - Norwegian Museum Contact

The Norwegian Museum of Science, Technology and Medicine in Oslo, Norway experienced an ARISS contact on September 11. A webcast presentation of the contact is now available.
See: http://www.tekniskmuseum.no/film/frontpage

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

## 83. WSR-270 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-10-01 01:20:59 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002d01cb6106$e0140ea0$a03c2be0$@net>
Source record: 386
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-270.S1
WSR 270 Part 1 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S1
FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice: V/U
Uplink: 145.880 MHz FM
Downlink 1: 435.300 MHz FM
Downlink 2: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.708 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09272010]
=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[09062010]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Scheduled Operations
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09272010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-270.S2
WSR 270 Part 2 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S2
FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]

=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]

=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice: V/U
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM
Downlink 2: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[092702010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[09062010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK

145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09272010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-270.S3
WSR 270 Part 3 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S3
FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]

=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK

435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[09062010]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-270.S4
WSR 270 Part 4 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S4
FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

## 84. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-10-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1285912800@panix.com>
Source record: 387
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 85. get kelp

Newsgroup: rec.radio.amateur.space
Date: 2010-10-01 22:59:30 UTC
From: kb9rqz <mark@kb9rqz.com>
Message-ID: <d6411008-4782-4578-a1b1-08eb04145b97@g18g2000vbn.googlegroups.com>
Source record: 388
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Oct 1, 2:00 am, r...@panix.com (rec.radio.amateur.moderated Admin)
wrote:
> Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
> Archive-name: radio/ham-radio/moderated/crossposting
> Revision: 1.1 2009/04/12 19:42:04
> Posting-Frequency: posted monthly
> URL:http://www.panix.com/~rram/usenet/rram/index.html

stop the trolling

## 86. ANS-276 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-10-03 13:53:00 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000e01cb6302$45fa5830$d1ef0890$@net>
Source record: 389
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-276

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

******SYMPOSIUM WEEK IN CHICAGO*******

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Congratulations to the ARISSat-1 Team!
* Symposium links for updates
* AMSAT Symposium
* ARISS ham radio contact planned with IRSEA Institute, Italy
* OSCAR-11 Signals Heard
* AO-51 Resumes Operation
* ARISS Status - 27 September 2010

SB SAT @ AMSAT $ANS-276.01
Congratulations to the ARISSat-1 Team!

AMSAT News Service Bulletin 276.01
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.01

Congratulations to the ARISSat-1 Team!

ARISSat-1 will be the presented in detail during the Saturday morning sessions at the AMSAT 2010 Space Symposium and Annual Meeting which will be held on Friday, October 8 through Sunday, October 10.

AMSAT Vice-President of Engineering Tony Montiero, AA2TX and ARISSat Project Manager Gould Smith, WA4SXM along with ARISSat team members will host the Saturday ARRISat-1 sessions including:

+ ARISSat-1 Overview
+ Software Radio Technology
+ BPSK-1000 format for ARISSat-1
+ ARISSatTLM - Software Demodulator and Telemetry Program Calculating

+ Available Power (Examples: ARISSat & Fox) Power System Assembling
+ ARISSat-1
+ ARISSat-1 Vibration Testing

The team plans to have a working ARISSat-1 prototype attending the Symposium.

ARISSat-1 design and operations are discussed in detail in these papers published in the 2010 Symposium Proceedings book:

ARISSat-1 Overview
Tony Monteiro AA2TX

ARISSat-1 Power System
Tony Monteiro AA2TX

Software Radio Technology on ARISSat-1
Tony Montiero AA2TX

ARISSatTLM - A Software Demodulator and Telemetry Display Program for the ARISSat-1 Satellite
Douglas Quagliana KA2UPW

BPSK-1000 format for ARISSat-1
Phil Karn KA9Q

An additional feature presentation and paper will introduce you to AMSAT's next satellite ... AMSAT-FOX Preview by Tony Monteiro, AA2TX.

The AMSAT 2010 Space Symposium and Annual General Meeting will be held at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

On-line registration for the Symposium continues on-line at the AMSAT Store site: http://www.amsat-na.com/store/SymposiumReg.php
The registration fee is $45.00 from now through 5 October. Online registration closes 5 October at Midnight. Registration at the door will be $50.00.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-276.02
Symposium links for updates

AMSAT News Service Bulletin 276.02
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.02

2010 AMSAT Symposium Home Page
http://www.amsat.org/amsat-new/symposium/2010/index.php

Symposium Schedule
http://www.amsat.org/amsat-new/symposium/2010/SymposiumSchedule.php

List of Presentations
http://www.amsat.org/amsat-new/symposium/2010/Presentations.php

Hotel Information
http://www.amsat.org/amsat-new/symposium/2010/Hotel.php

Food and Drink information
http://www.amsat.org/amsat-new/symposium/2010/FoodandDrink.php

Banquet Speaker
http://www.amsat.org/amsat-new/symposium/2010/BanquetSpeaker.php

Board of Directors Agenda
http://www.amsat.org/amsat-new/symposium/2010/BoardofDirectorsAgenda.php

[ANS thanks the 2010 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-276.03
AMSAT Symposium

AMSAT News Service Bulletin 276.03
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.03

Of course we all know that this week the AMSAT Symposium will be
held in Chicago. You will be able to find all the latest details
at the AMSAT Website http://www.AMSAT.org. Information on when
certain talks will be presented and full proceedings will be there
for the asking. Details for all events, including a tour of the Fermi
Lab are there for all to decide on what they would like to see and
hear. Take this as an opportunity to get together with your elected
officials and discuss with them what is important to you. The full
schedule will be updated as they are finalized.

The 2010 Symposium Schedule is posted on the amsat.org web at:
http://www.amsat.org/amsat-new/symposium/2010/SymposiumSchedule.php

A few minor tweaks may be necessary over the next 7 days. The final
version will be available on-site at the Symposium next week. Authors
and presenters will be e-mailed any schedule change affecting the talks.

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SB SAT @ AMSAT $ANS-276.04
ARISS ham radio contact planned with IRSEA Institute, Italy

AMSAT News Service Bulletin 276.04
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010

To All RADIO AMATEURS
BID: $ANS-276.04

An ARISS (Amateur Radio on the International Space Station) radio contact is planned with IRSEA, a non-profit Institute for Research and Education, located in southern Italy.

IRSEA's mission is to provide a bridge between university research and trade unions and corporations in the fields of education, development and innovative research.

The ARISS contact is scheduled Tuesday 5 October 2010 at 15:28 UTC. The contact will be a telebridge, operated by ARISS ground station K6DUE, located in Goddard Space Flight Center, Maryland. Stations in North America may be able to directly hear the ISS downlink on 145.800 MHz.

The contact will be available on EchoLink AMSAT conference server and IRLP Discovery Reflector 9010. The contact will be webcast on: http://www.cittadellamediterraneadellascienza.it/

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers onboard the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, technology and learning.

[ANS thanks ARISS Chairman Gaston Bertels, ON4WF and the SouthGate ARC news for the above information]

/EX

SB SAT @ AMSAT $ANS-276.05
OSCAR-11 Signals Heard

AMSAT News Service Bulletin 276.05
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.05

OSCAR-11 Signals Heard

Clive G3CWV reported that OSCAR-11 was heard by JA0CAW on August 29 after being silent since March 30, 2010. Since August 29 it continued to be heard until September 8 and then again September 18-29. Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

There has been a significant change since the previous period of activity which ended in March 2010. The on-board clock is now very stable. It's gained only three seconds in 30 days. This is comparable with its accuracy when the satellite was fully operational. During its first 21 years it gained approximately one minute per year. However, there is still an accumulated loss of 309 days, which has occurred during eclipses of the last few years!

The other change is that it's now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

These two changes suggest that some part of the system may have recently failed 'open circuit' thus reducing the overall power drain of the system, and allowing more power to be available during eclipses. There was an unexplained current drain observed when analogue telemetry was last transmitted. This fault might have cleared. Interestingly, the status telemetry shows that the Digital Store & Readout experiment has switched off, since the satellite was previously heard in February.

The satellite appears to be operating for ten days on, followed by ten days off, so it should start transmitting again around October 9, 2010.

Listen for OSCAR-11's VHF AFSK FM ASCII Telemetry beacon on 145.826 MHz.

Reception reports have been received from Bernard FY1LE, Roland DG1EBR, Mike DK3WN, Tetsu JA0CAW, Adam SQ8MFC, MM0DNX, Tony VK3KKP/G8HIM, Martin DC1MAR, John M0BIC, Etienne F1GRR and Carlos KD6GRF. Many thanks to everyone.

Many reports have also been added to the live satellite status page, on the website set up by David KD5QGR and Bob WB4APR. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites. Strongly recommended for future reports! The URL is http://oscar.dcarr.org/index.php

For the benefit of new listeners, here is a short history of OSCAR-11. It was lauched in 1984, providing telemetry and other digital services for amateur radio and educational users. During its many years of operation it survived long periods of eclipses and continuous full sunlight.

In 2002 the satellite reverted to its default mode of operation, controlled by the watchdog timer. In 2005 all the analogue telemetry channels failed. Solar eclipses also started to cause the watchdog timer cycle to reset, which switched off the satellite for approximately 15 days.

In 2008 solar eclipses became a permanent feature of every orbit, causing the satellite to switch off for about 15 days, probably after only one orbit of transmission. Thus the satellite was not expected to be heard again for any continuous period until 2019, when there will be some eclipse free periods. However, the satellite started transmissions unexpectedly in November 2008. These continued until March, when it was followed by silence until until the recent period of activity.

Clive's webpage at www.g3cwv.co.uk contains sound files of the satellite's beacon, archived news and telemetry, and information about using soundcard and hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-276.06
AO-51 Resumes Operation

AMSAT News Service Bulletin 276.06
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.06

AO-51 Resumes Operation

After a software crash on September 26 aboard AO-51 took the satellite off the air Ground Station Mark Hammond, N8MH reported that as of September 29, "The reloading of AO-51 is essentially complete; the bird is in good order."

The AO-51 Command Team configured the satellite for simultaneous operation of both the S-band and U-band transmitters. The tradeoff is that U-band will be low in power-around 250 mW or so. Also, please notice the use of the 145.880 MHz uplink!

September 29
FM Repeater, V/S-U
Uplink: 145.880 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM *and* 435.300 MHz FM (at low power!)

Mark said, "This is a great time to work on improving the sensitivity of your receiver setups! The 250 mW will challenge some of you for sure. PLEASE be sure to follow the "if you can't hear it, don't try to uplink" basic rule of satellite operation."

If the satellite supports the dual downlink mode OK, controllers may extend the V/S-U mode a few days past the original mode schedule in order to give mode S operators a fair shake at some operations and testing--while at the same time allowing some low power mode V/U

operations.

Check the Command Team and Operations Group AO-51 News web page for the latest September 2010 AO-51 Schedule:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark Hammond N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-276.07
ARISS Status - 27 September 2010

AMSAT News Service Bulletin 276.07
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.07

1. School Contact

English Estates Elementary School in Fern Park, Florida had a scheduled contact on Thursday, September 30 at 18:00 UTC. Through hands on activities, students will learn about space satellite tracking. The school has an established liaison with the Lake Monroe Amateur Radio Club and an on-campus

ham radio emergency operations station.

2. Astronaut Doug Wheelock Chats with New York Students

On Wednesday, September 22, students from Windsor Central and Owego-Apalachin School Districts in New York participated in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Doug Wheelock, KF5BOC. Wheelock, a graduate of Windsor Central High School, fielded 16 questions put to him by the youth during the ISS pass. The school districts collaborated with the area's Kopernik Observatory and Science Center to put together an education program for the students which included topics on space, radio communication, satellites and rocketry. The final outcome of this project will be the purchase of amateur radio equipment for each school and the formation of amateur radio clubs for the youth.

3. ARISS International Team Meeting Held

The monthly ARISS-International team meeting was held on Tuesday, September 21. Topics of discussion included the recent ARISS elections, Columbus Module equipment and a status on ARISSat-1. Minutes have been posted. See: http://www.rac.ca/ariss/arisstel2010-09-21.htm

4. MAI-75 Experiment to be Activated

The Russian ISS crew members will activate the MAI-75 (Moscow Aviation Institute) experiment on September 27 - 29. The activity is planned

for 2 runs per day over Western Russian between approximately 07:00 - 11:00 UTC.

5. Amateur Radio Newsline Covers ARISS Activities

On September 24, the Amateur Radio Newsline Report 1728 included two ARISS related stories. "Ham Radio in Space: ISS ATV Activated Briefly on September 14th" is about the recently held MAI-75 Slow Scan Television session. The second item, "Ham Radio in Space: ARISSAT 1 Near Completion" covers the final preparations of ARISSat-1 prior to shipping to Russia. Both stories may be found at: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

## 87. Radio Meteor Obs. Bull. September 2010

Newsgroup: rec.radio.amateur.space
Date: 2010-10-06 18:49:22 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <e4hpa6p79ulcr80cc2pigggvvhoncklbjf@4ax.com>
Source record: 390
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 206 of September 2010 (102 K) is available now as

http://www.rmob.org/rmobtext/rmob1009.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 88. ANS-283 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-10-10 03:53:37 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000901cb682e$b429e560$1c7db020$@net>
Source record: 391
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-283

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1 Delivered to JSC Houston; Next Journey to Russia
* AMSAT Board of Directors Names Senior Officers for 2010-2011
* AMSAT's Educational Outreach Reaches New High
* AO-51 Repeater Mode to Support JOTA Operations
* AO-51 Revised Schedule for October
* Call for Volunteers AMSAT at the NASM, Washington DC October 16
* SA AMSAT Presentation at South African Space Congress
* KiwiSat Team Requires FPGA Chips
* AMSAT Awards
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-283.01
ARISSat-1 Delivered to JSC Houston; Next Journey to Russia

AMSAT News Service Bulletin 283.01
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.01

AMSAT ARISSat Project Manager, Gould Smith, WA4SXM reported, ARISSat-1/RadioSkaf V, was shipped from Orlando, Florida to the Johnson Space Center in Houston and has arrived. From there it will be sent to Russia in early October. In Russia it will have the Kursk experiment added to the spaceframe.

The next milestone, the NASA Phase 2 Safety Review, is scheduled for October 13 - 14, 2010. The ARISSat-1 team says that actually two satellites (flight and backup) were ready for the trip to Russia.

A new Russian Orlan suit battery will be shipped to the ISS separately to be installed into the satellite (called the Amateur Radio Experiment) onboard the ISS. ARISSat-1 is scheduled to be sent to the ISS aboard Russian Progress vehicle 41P in January 2011 and deployed during EVA R-28 in February 2011.

[ANS thanks whomever for the above information]

/EX

SB SAT @ AMSAT $ANS-283.02
AMSAT Board of Directors Names Senior Officers for 2010-2011

AMSAT News Service Bulletin 283.02
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.02

Election of AMSAT's Senior Officers was one of the first orders of business to be settled once the AMSAT Board of Directors meeting opened on October 7, prior to the start of the 2010 AMSAT Space Symposium held near Chicago, IL.

The following positions were voted upon and filled:

President Barry Baines, WD4ASW
Vice-President Operations Drew Glasbrenner, KO4MA
Vice President User Services Gould Smith, WA4SXM
Vice-President Engineering Tony Monteiro, AA2TX
Secretary Alan Biddle, WA4SCA
Treasurer Keith Baker, KB1SF/VA3KSF
Manager Martha Saragovitz

The following Senior Officer positions remained open at this time awaiting appointments:
Executive Vice President
Vice-President Human Spaceflight
Vice-President Marketing

The AMSAT Board of Directors elected on September 15 include:

Barry Baines, WD4ASW
Dr. Thomas A. Clark, K3IO
Lou McFadin, W5DID
Drew Glasbrenner, KO4MA
Gould Smith, WA4SXM
Alan Biddle, WA4SCA
Tony Monteiro, AA2TX

The First Alternate member on the Board of Directors remains open at this time due to the resignation of Board Member Bill Ress, N6GHZ. First Alternate Board Member Tony Monteiro, AA2TX assumed Bill's seat on the Board according to AMSAT's Bylaws.

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-283.03
AMSAT's Educational Outreach Reaches New High

AMSAT News Service Bulletin 283.03
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.03

AMSAT President, Barry Baines, WD4ASW announced at the 2010 Symposium that the Board of Directors voted to approve the Memorandum of Understanding between AMSAT and the University of Florida, Gainesville to embark upon an educational outreach program.

Discussion with University of Florida's Dr. Norman Fitz-Coy, who leads a graduate Cubesat development program, has revealed several opportunities for AMSAT members to mentor the students on electronics and system engineering issues including on-orbit satellite management learned from operating AMSAT's fleet of spacecraft. AMSAT will also offer assistance with ground station development and operation.

The AMSAT Board of Directors also voted to continue with the educational outreach project between AMSAT, Binghamton University - SUNY, and IBM's Heritage Corridor Center for Advanced Studies. The NextGen Satellite Program is lead by Alex Harvilchuck, N3NP. During the first year of this cooperative effort the NextGen student team characterized supercapacitor performance in vacuum and developed an engineering model of deployable solar cells on a 3U cubesat.

AMSAT Vice-President of Engineering Tony Monteiro, AA2TX discussed plans for development of AMSAT's Project Fox cubesat. One goal for project Fox is to establish development of "standardized" cubesat components including reliable software-defined transponders, telemetry downlink, and spacecraft power management. A stable, well-documented, standardized "cubesat bus" can be made available to university cubesat development teams, freeing them to concentrate on the science of their research programs. This will have the net effect of having an amateur transponder flying in many cubesats in the future.

The NextGen partnership with AMSAT-SUNY-IBM will perform the system engineering leveraging on AMSAT's pioneering Project Fox Cubesat.

AMSAT's educational outreach program provides several advantages to ensure the continued growth of amateur radio in space by training the next generation of space engineers:

+ AMSAT establishes a presence on major universities with state-of-the-art facilities and satellite development teams.

+ Potential for student projects focused on AMSAT needs.

+ Broadening of AMSAT's presence in the wider university community.

+ Increased potential for involvement with research/development grant-funded opportunities for AMSAT and AMSAT members.

+ Establishing a program that offers significant traction for further education outreach.

This is developing news with ongoing details to be reported in future news bulletins, the AMSAT web, and the AMSAT Journal magazine.

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-283.04
AO-51 Repeater Mode to Support JOTA Operations

AMSAT News Service Bulletin 283.04
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.04

AO-51 Command Station Mark Hammond N8MH, said that the AO-51 Operations Team will configure the satellite to support the Jamboree-On-The-Air (JOTA) for Scouting October, 16 - 17:

AO-51 FM Repeater, V/U
Uplink: 145.880 MHz FM (no PL tone)
Downlink: 435.150 MHz FM

No transmitter power or antenna restrictions usually associated with the QRP mode of AO-51 operation on this repeater apply to JOTA stations. Use good amateur practice during your operations.

Non-scouting users are asked to use 10 watts or less, and omni-directional or handheld antennas on this repeater. Last minute schedule changes may be required due to the power budget aboard AO-51. Also non-scouting stations please give way to JOTA stations or QSOs with JOTA stations

The 2010 Jamboree-on-the-Air, or JOTA, will begin on Saturday, October 16, 2010, at 00:00 hours local time, and end on Sunday, October, 17, 2010, at 23:59 hours local time.

This is an annual Scouting and amateur radio event sponsored by the World Scout Bureau of the World Organization of the Scout Movement. Thousands of amateur radio stations around the world participate.

In the United States, Cub Scout dens and Boy Scout patrols visit a local amateur's ham shack during JOTA. Amateurs set up stations giving Scouts and leaders a chance to exchange greetings with Scouts from other areas. The exchanges typically include information such as Name, QTH, Scout rank, Hobbies, and Age. Full details from the

World Scout Bureau can be found on-line at:
http://www.scouting.org/filestore/intl/pdf/130-218.pdf

Scouts and Amateur Radio operators may also find the ARBONET III
high altitude balloon launch for JOTA interesting. ARBONET has
published full details of their mission on-line at:
http://www.arbonet.net/ARBONET%20FLIGHTS.html

Launch Date: Saturday, Oct 17, 2009 9:30 AM CDT, Clarksville, Texas
Launch Net: K5FRC - 3.910MHz +/-, Starting at 9:00AM CST
Payloads: 2M Voice Beacon: ID: K5ARB - 144.390 MHz FM
2M APRS: ID: K5ARB-1. 144.390 MHz.
2M CW Homing Beacon ID: K5ARB. Comprised of FM carrier
with CW tone at 147.475 MHz
2M APRS: K5ARB-2 144.390 MHz.
70CM / 2M FM Cross-Band Repeater: K5ARB -
445.800 MHz UP, 145.560MHz Down
20M CW Homing Beacon ID: K5RWK - 14.058 MHz

A DX-cluster for spotting JOTA activity can be accessed via telnet
at pi4raz.nl port 7300. This cluster will be available for scouting
purposes all year round, not just for JOTA.

[ANS thanks Mark N8MH, World Scouting, and ARBONET for the above
information]

/EX

SB SAT @ AMSAT $ANS-283.05
AO-51 Revised Schedule for October

AMSAT News Service Bulletin 283.05
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.05

The AO-51 Command Team and Operations Group has released this revised
schedule for October, 2010:

October 3 (late UTC)
---
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.708 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

October 10 (late UTC)
---
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)

Downlink: 435.300 MHz FM

QRP (Oct. 10-15) and JOTA (Oct. 16-17) Only FM Repeater, V/U
Please give way to JOTA stations or QSOs with JOTA stations
Uplink: 145.880 MHz FM (no PL tone)
Downlink: 435.150 MHz FM

October 18 (late UTC)
---
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.708 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

Monitor http://www.amsat.org/amsat-new/echo/CTNews.php for the
latest Command Team and Operations Group AO-51 News.

[ANS thanks Mark Hammond N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-283.06
Call for Volunteers AMSAT at the NASM, Washington DC October 16

AMSAT News Service Bulletin 283.06
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.06

Samudra Haque, N3RDX is leading the AMSAT outreach activity at the
Hispanic Heritage Month Family Day - Argentina in Air and Space which
will held be at the National Air and Space Museum in Washington DC.
The event will take place between 10 AM - 3 PM. Details can be found
at: http://www.nasm.si.edu/

Samudra says he needs help with the AMSAT display and if you can vol-
unteer any exhibition/display resources including pictures, posters.
AMSAT members would set-up tables with equipment, posters, and other
items of interest to visitors. These tables would be staffed throughout
the day by AMSAT members. You are welcome to volunteer for a couple of
hours or the whole day. Free parking will be provided to all, and lunch
will be provided for people who volunteer the whole day.

Contact Samudra via e-mail (samudra.haque@gmail.com) if you need more
information or can help out.

[ANS thanks Samudra Haque, N3RDX for the above information]

/EX

SB SAT @ AMSAT $ANS-283.07
SA AMSAT Presentation at South African Space Congress

AMSAT News Service Bulletin 283.07
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.07

Hans van de Groenendaal, ZS6AKV representing SA AMSAT presented a paper at the First Annual South African Space Congress in Cape Town at the SA Astronomical Observatory on 7 and 8 October 2010.

The paper entitled 'Amateur Radio's significant contribution to satellite communication' will trace the many facets of Amateur Radio's involvement in space.

ZS6AKV reviewed the major contributions made by Amateur Radio to satellite communication and focused on some of the current projects both world-wide and in South Africa. His paper will also touched on other space related activities such as SETI and Radio Telescopes.

SA AMSAT stated a copy of the paper will be available for download from http://www.amsatsa.org after the event.

[ANS thanks SA AMSAT and SouthGateARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-283.08
KiwiSat Team Requires FPGA Chips

AMSAT News Service Bulletin 283.08
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.08

Terry Carrell, ZL3QL sent a request on behalf of the AMSAT-ZL KiwiSAT team. They require four (4) Cypress CY7C383A-0JC or QuickLogic QL12x16-2PL68C FPGA chips, used & un-programmed.

To date the team had 2 lots of 4 from two different sources but all proved to have been compromised and could not be programmed. Terry wrote, "We had a small stock but they have all been used during our development work and while we can purchase new units, the source requires us to buy a significant number more than our requirement which is proving to be very expensive. We are happy to pay for good units once we have confirmed they are clean. These chips will fly so it is important we have perfect units."

If you help in any way, please let Terry, ZL3QL know. Terry can be contacted via e-mail: tcarrell@xtra.co.nz

[ANS thanks Terry, ZL3QL and AMSAT-ZL for the above information]

/EX

SB SAT @ AMSAT $ANS-283.09
AMSAT Awards

AMSAT News Service Bulletin 283.09
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.09

AMSAT Director Contests and Awards Bruce Paige, KK5DO says congratul-
ations are in order for the awards that he processed over the last
month.

The following have entered into the Satellite Communicators Club for
making their first satellite QSO:

Jay Kendall, N2JK
Darek Dabek, SP9TTX
Marisuz Kocot, SQ9MES

The following have earned the AMSAT Communications Achievement Award:

Bob Herrell, AJ5C #517
Jim Adams, K0BAM #518
Leo Hucin, OK2UUJ #519
Jay Kendall, N2JK #520

The following have earned the South Africa AMSAT Communications
Achievement Award:

Jim Adams, K0BAM #US149
Jay Kendall, N2JK #US150
Marisuz Kocot, SQ9MES #US151

The following have earned the AMSAT Century Club Award:
John Papay, K8YSE #39

The following have earned the W4AMI Satellite Communications
Achievement award:

Bob Herrell, AJ5C, #64
Zachary Beougher, KD8KSN #65
Mariusz Kocot, SQ9MES, #66 (plus 1 endorsement)
Darek Dabek, SP9TTX, #67 (plus 3 endorsements)

The following have earned the W4AMI 5000 Satellite Communications
Achievement award:

Darek Dabek, SP9TTX #24

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-283.10
Satellite Shorts From All Over

AMSAT News Service Bulletin 283.10
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.10

+ Congratulations to Sebastian, W4AS for attaining Satellite VUCC Award #200!

+ A humorous overview of the review process for the upcoming MAVEN (Mars Atmosphere and Volatile Evolution) mission to Mars has been posted by NASA. NASA gave the mission a green light to continue development which will investigate the mystery of how Mars lost much of its atmosphere: http://www.universetoday.com/75011/so-you-want-to-build-a-satellite/ Additional information about the MAVEN mission can be found at the MarsDaily.com web site: http://tinyurl.com/27zvovx

+ A good overview of HO-68 Operating has been posted by Henk, PA3GUO http://www.youtube.com/watch?v=o6oDgUTHCwg

+ A short video introduces the Firefly mission, a CubeSat built by undergraduate students with the partnership of Goddard Space Flight Center and the National Science Foundation. http://tinyurl.com/22tm3z5 (SoutGateARC site)

+ For those interested in building your own satellite antennas check out this article by Derek Hilleard, G4CQM considering three different state-of-the-art 7 element yagi designs for 144MHz. http://g4cqm.www.idnet.com/2M%20YAGI/ (via SouthGate)

+ This is not satellite related but you guys are going to like this one anyway. Watch this helmet-mounted camera video as our two heroes make a stomach-churning climb to the top of this 1,768 foot mast just to change a Xenon flasher: http://tinyurl.com/2c3nmul (SouthGate)

+ ARISS Chairman Gaston Bertels, ON4WF invites you to view the photos and listen to a a mp3 recording of the successful ARISS (Amateur Radio on the International Space Station) school contact with Norwegian Museum of Science, Technology and Medicine: http://www.ariss-eu.org/2010_09_25.htm

+ The next Hudson Valley Satcom Group net is Thursday Oct. 14, starting at 8PM EDT (UTC - 4) on the 146.970 MHz repeater (Down 600 & Pl. 100) and an Echo link node of: N2EYH-L. More info: http://www.hvsatcom.org (via Stu, WA2BSS)

+ Videos of the 2010 annual meeting of AMSAT-Italy held at Esrin south of Rome are available on the ESA website. http://download.esa.int/flv/amsat-i_2010_part1.flv (ISS) http://download.esa.int/flv/amsat-i_2010_part7.flv

http://download.esa.int/flv/amsat-i_2010_part4.flv (ISS Digital ATV)
http://www.esa-spaceweather.net/sda/ionosfera/amateur_radio.html

+ Paul 2E1EUB says starting this weekend and for the next 14 days he will be active at his 2M1EUB location in Scotland for the first 7 days. He will operate the last 7 days from the north west coast of Scotland.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that, please keep this advice in mind for your next antenna project, working together, two men can do the work of three. The trick is convincing those two other suckers to work together.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 89. a test posting

Newsgroup: rec.radio.amateur.space
Date: 2010-10-13 21:17:44 UTC
From: Ng Spim <ng@spim.woeishyang.com>
Message-ID: <i957lo$v13$1@mawar.singnet.com.sg>
Source record: 392

Suspendisse potenti. Aenean cursus odio in sem ornare euismod. Duis aliquet turpis eu est commodo aliquam. Vivamus fringilla, ligula euismod congue cursus, tellus dui sagittis tortor, imperdiet varius lectus urna quis ante. Donec sollicitudin ligula quis velit tincidunt vitae consequat nisi tempus. Suspendisse potenti. Suspendisse blandit rutrum mi, at laoreet risus facilisis sit amet. Curabitur tincidunt quam fermentum odio vehicula ac consequat turpis hendrerit. Curabitur rhoncus imperdiet felis, sollicitudin semper dolor pellentesque vel. Aliquam lacus est, viverra adipiscing adipiscing viverra, lacinia et diam.

## 90. ANS-290 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-10-17 13:34:11 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cb6dff$f723aeb0$e56b0c10$@net>
Source record: 393
Cross-posted to: rec.radio.amateur.space,rec.radio.info
Body handling: HTML body converted to readable text

AMSAT NEWS SERVICE
ANS-290

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 Info Added to AMSAT Web
* 2010 AMSAT Symposium Proceedings Added To Online Store
* FUNCube Dongle Development Status
* Gpredict 1.2 released
* ARISS Status - 11 October 2010

SB SAT @ AMSAT $ANS-290.01
ARISSat-1 Info Added to AMSAT Web

AMSAT News Service Bulletin 290.01
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.01

Thanks to the ARISSat-1 team for providing a copy of their Symposium presentation materials. Links to the following have been posted at http://www.amsat.org.

1. ARISSat-1 color frequency guide
2. PDF copy of ARISSat-1 Overview presentation slides (~1MB)

Lots more information will be published in the AMSAT Journal.

ARISSat-1 will have these features ...

Transponder
. Mode U/V (70 cm Up, 2m Down)
. Linear
. Inverting (Tx LSB, Rx USB)
. 16 kHz bandwidth
. Can be worked with QRP transmitter and omni antennas

Digital Beacon
. BPSK-1000 w/FEC by Phil Karn KA9Q
. Legacy mode 400 BPSK (P3 type)
. Telemetry Data
. Experiment Data
. PC/Mac demodulator & decoder software will be available

CW Beacon
. Call sign S01S
. CW Telemetry (subset)
. Call signs or names of developers
. CW1 or CW2 identifies BPSK mode

FM Audio
. Call sign S01S
. Voice Telemetry (subset)
. SSTV in Robot-36 format
. Voice Greetings

Voice Greetings
. 24 different greetings
. Mostly children
. Special one from Yuri Gagarin
. Secret word
. 15 different languages
English Spanish Russian French
Italian Dutch Swedish Japanese
Chinese Catalan Bengali Portuguese
Hebrew Nepalese German

[ANS thanks the ARISSat-1 team for the above information]

/EX

SB SAT @ AMSAT $ANS-290.02
2010 AMSAT Symposium Proceedings Added To Online Store

AMSAT News Service Bulletin 290.02
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.02

The 2010 Symposium Proceedings have been added to the AMSAT Online
Store.

Please be aware that it is heavy and shipping overseas will be
expensive. Martha will add the shipping charges at time of mailing
and notify you of the exact amount for postage.

http://www.amsat.org

Click on Online Store in the left margin

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-290.03
FUNCube Dongle Development Status

AMSAT News Service Bulletin 290.03
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.03

Howard Long, G6LVB, reports that he is enormously gratified by the large volume of interest shown the FUNcube Dongle over the past few weeks. With so much interest being shown, Howard took some time to provide an update about the development progress.

The FUNcube Dongle was originally designed to be an accessible way to be able to receive amateur satellites, most notably AMSAT-UK's forthcoming FUNcube cubesat (http://www.funcube.org.uk).

What does accessible mean? Essentially we mean both low cost and easy to setup. The original target market is, and remains, what Howard calls,

"the unconverted", those, particularly in education, who need a means of being able to practically introduce and demonstrate real space technology in a hands-on way.

When the work on FUNcube was distributed, Howard was given the task of coming up with the ground segment, and the result is the FUNcube Dongle.

As it's tuned out, the FUNcube Dongle has the added bonus that it's a VHF/UHF and low microwave equivalent to the well-known Softrock in an integrated plug and play package. The intention is to have two models, an entry-level frequency-restricted version targeted at the educational market, and a full blown Pro version that seems to piqued the interest of many radio amateurs, radio astronomers and short wave listeners.

In pr&#65533;cis, it includes an integrated front end filter, LNA, quatrature

LO, zero-IF quadrature downconverter, dual 16 bit ADC and USB soundcard.

In it's simplest of forms, it's SMA in, USB out. It's also compatible with pretty much any software that works for the Softrock, for example LinRad,Spectravue, M0KGK and Rocky.

The passband is 96kHz, tuneable from 64MHz to 1,700MHz. The tuning is via a USB HID interface meaning that as well as your favourite soundcard

SDR program, you'll need a little app supplied with the FUNcube Dongle to control the centre frequency or you'll end up only listening to Howard's favorite FM broadcast station ;-)

It's also compatible with XP, Vista , Windows 7 in 32 bit and Vista and Windows 7 in 64 bit. Initial testing on the Mac and Ubuntu 32 and 64 bit shows compatibility too, however the frequency control application for those platforms has not been written yet.

So, no USB drivers are required!

To keep people informed going forward, a blog has been established at:
http://www.funcubedongle.com/.

Also there's a video of the first pre-production unit at:
http://www.youtube.com/watch?v=zTBPLqal0

Projected availability of the first production batch of the Pro version
is December 2010. Pricing is subject to assembly costs, but to give you
indicative pricing we are working on an initial price of the Pro ver-
sion to be circa USD150/GBP100.

[ANS thanks Howard, G6LVB, for the above information]

/EX

SB SAT @ AMSAT $ANS-290.04
Gpredict 1.2 released

AMSAT News Service Bulletin 290.04
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.04

Alex Csete, OZ9AEC, reports that after one year of development,
bug fixing and testing it was decided that it was time to make a
new release of Gpredict. This release features several new features
such as the re-written layout engine as well as lots of bug fixes.

The new layout engine allows any combination of views to be created
in a NxM grid, see an example screenshot:
http://picasaweb.google.com/lh/photo/eF3tizT-Xj-az6VcykUzaA

The sky at a glance widget has been improved to look nicer and to
be more interactive. Moving the mouse over a pass pops up an info
widget showing info about the pass. Clicking on the pass brungs up
the pass details dialog. See:
http://picasaweb.google.com/lh/photo/anU9WhY4_40Gk-WVCP7ZWw

The info pop-ups have also been added to the map view and the polar
video. Moving the mouse over a satellite will show the current position
of the satellite as well as time until next AOS or LOS. You can see a
demo video here:
http://www.youtube.com/watch?v=C4A6onbBg

The new release can be downloaded from:
https://sourceforge.net/projects/gpredict/files//Gpredict/1.2/
Currently only the source package is available. Binary packages for
Windows, Mac and various Linux distributions should become available
shortly.

Thanks to everyone who has contributed to this release!

[ANS thanks Alex, OZ9AEC, for the above information]

/EX

SB SAT @ AMSAT $ANS-290.05
ARISS Status - 11 October 2010

AMSAT News Service Bulletin 290.05
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.05

IRSEA Contact Successful
An Amateur Radio on the International Space Station (ARISS) contact took place between IRSEA, a non-profit Institute of Research and Education, in Bisceglie, Italy and Doug Wheelock, KF5BOC on the ISS on Tuesday, October 5, via telebridge station K6DUE in Greenbelt, Maryland. Michele Mallardi, IZ7EVR introduced the ARISS event with a presentation to an audience of 100 students and visitors. Obscurations from the ISS structure may have hindered the contact, allowing time for five questions to be answered. The contact was part of a professional education program, "Promotion of the characteristics of the Puglia region" which dealt with space communications, space life, space achievements, advantage of space research, use of man-made satellites and the International Space Station.

ARISSat-1 Safety Review this Week
The Johnson Space Center Payload Safety Review Panel will perform a Phase 2 flight safety review of ARISSat-1 on the mornings of Wednesday and Thursday, October 13 and 14 in Houston. Participation in the review will include U.S. and Russian ARISSat team members as well as RSC-Energia safety specialists.

Challenger Learning Center Opens Ham Station
On Monday October 4, a satellite ground station was opened at the Challenger Learning Center (CLC) in Oregon, Ohio. The station will pique students' interest in math and science and will allow the youth to contact the International Space Station. CLC will provide lesson plans and activities on amateur radio and will use the system during camps and workshops. The Toldeo Blade posted a story on the event. "Kids wired to learn to operate ham radios" may be found at:
http://www.toledoblade.com/article/20101009/NEWS16/10080352

ARISS Facebook Page Status
Amateur Radio on the International Space Station (ARISS) has generated some interest since it launched its Facebook page at the end of August. To view, go to:
http://www.facebook.com/pages/Amateur-Radio-on-the-International-Space-Stati
on/143541532324016

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

## 91. WSR-284 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-10-17 14:02:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000d01cb6e03$ec3821d0$c4a86570$@net>
Source record: 394
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-284.S1
WSR 284 Part 1 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S1
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice 1: V/u
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM

Voice 2: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.708 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10112010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[09062010]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Scheduled Operations
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-284.S2
WSR 284 Part 2 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S2
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW

Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice 1: V/u
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM

Voice 2: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10112010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-284.S3
WSR 284 Part 3 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S3
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305

Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087

Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[09062010]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-284.S4
WSR 284 Part 4 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S4
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional

benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 92. Re: a test posting

Newsgroup: rec.radio.amateur.space
Date: 2010-10-21 22:35:47 UTC
From: ai8o <ai8o@lexcominc.net>
Message-ID: <9ed3acb7-6346-4c78-8486-6717a968507f@l20g2000yqm.googlegroups.com>
Source record: 395

Semper Ubi,
Sub Ubi!

## 93. WSR-291 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-10-22 12:47:02 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000d01cb71e7$29db19c0$7d914d40$@net>
Source record: 396
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-291.S1
WSR 291 Part 1 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S1
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice 1: V/u
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.708 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10182010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[09062010]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Scheduled Operations
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S2
WSR 291 Part 2 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S2
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW

Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice 1: V/u
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10182010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S3
WSR 291 Part 3 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S3
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305

Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087

Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[09062010]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S4
WSR 291 Part 4 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S4
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional

benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

# 94. HOT ACTRESS

Newsgroup: rec.radio.amateur.space
Date: 2010-10-23 14:25:58 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <6b9de02e-bee7-4d3c-94ae-1d69baa49b5c@g20g2000prg.googlegroups.com>
Source record: 397

AISHWARIYA LATEST HOT PICS

http://babes-devi.blogspot.com/2010/10/aish-latest-pics.html

SOUTHACTRESS IN A SEXY TOWELS

http://babes-devi.blogspot.com/2010/10/south-actress-in-sexy-towels.html

UDAYATHRA IN A BATH ROOM

http://babes-devi.blogspot.com/2010/10/udayatara-in-bath.html

ACTRESS IN A HOT RED DRESS

http://babes-devi.blogspot.com/2010/10/actress-in-sexy-red-dress.html

ASIN CUTE HOT PHOTOS

http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html

SEXY CHARMI IN A BATH

http://babes-devi.blogspot.com/2010/06/charmi-in-bath.html

FOR HOT PHOTOS&VIDEOS

http://babes-devi.blogspot.com/2010_06_01_archive.html

HOT SEXY BOOBS SHOW

http://babes-devi.blogspot.com/2010/09/sexy-boobs.html

ASIN CUTE HOT PHOTOS

http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html

MALLIKA SHARAWAT UNBELIVABLE PHOTOS

http://babes-devi.blogspot.com/2010/08/sexy-mallika.html

ANKHITA SPICY PHOTOS

http://babes-devi.blogspot.com/2010/08/sexy-ankhitha.html

## 95. ANS-304 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-10-31 01:16:11 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002101cb7899$2dcefb60$896cf220$@net>
Source record: 398
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-304

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1 Passes NASA Safety Review - Ready For Trip to Russia
* Second Amateur Radio Station to be Activated on ISS
* ARISS Contact With George Observatory Successful
* FP/KV1J Miquelon Island DXpedition on Satellites Until November 2
* FUNcube User Group on Yahoo.com
* Finnish Student Satellite Aalto-1
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-304.01
ARISSat-1 Passes NASA Safety Review - Ready For Trip to Russia

AMSAT News Service Bulletin 304.01
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.01

The NASA safety review for ARISSat-1 was completed with the written safety presentation and the written hazard report being approved with only simple modifications required. The safety review meeting was a two-day review running 6 hour sessions on October 13 & 14, 2010.

The ARISSat-1 Team expects to finalize shipping arrangements to Russia in the coming weeks. The Russian Energia Space Agency is handling the customs certifications to ship the satellite overseas.

When ARISSat-1 is shipped Lou McFadin W5DID and Mark Steiner K3MS will travel to Russia to assist with final testing before the satellite is forwarded to the launch site.

ARISSat-1 is scheduled to be sent to the ISS aboard Russian Progress vehicle 41P in January 2011 and deployed during EVA R-28

in February 2011.

The ARRL web describes ARISSat-1's features this week at:
http://www.arrl.org/news/arissat-1-suits-up-for-february-2011-launch
A description of ARISSat-1's successful vibration testing can be
found on-line at: http://www.amsat.org

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-304.02
Second Amateur Radio Station to be Activated on ISS

AMSAT News Service Bulletin 304.02
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.02

The original VHF and UHF Ericsson handheld radios in the Russian segment of the ISS originally used for ARISS have been approved by NASA for use in the US segment of the space station. When the Ericsson radios are installed in the Columbus module it will become the second Amateur Radio station aboard the ISS. A new power cable for the Ericsson radios is being delivered to the ISS.

ARISS members Kenneth Ransom and Steve Ponder met with Astronaut Paolo Nespoli for a training session on how to install the hardware in the Columbus module during Expedition 26. This launch is currently scheduled for December 13.

Paolo is looking forward to doing the installation work and is excited about using the equipment.

The second station is planned to initially use the same frequencies currently used by the Kenwood D-700 amateur radio transceiver aboard the ISS. Studies are underway to determine a compatible operating plan which would allow both stations to operate simultaneously.

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-304.03
ARISS Contact With George Observatory Successful

AMSAT News Service Bulletin 304.03
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.03

On Saturday, October 16, an Amateur Radio on the International Space Station (ARISS) contact was held with scouts and astronomy

club members attending the Astronomy Day event at George Observatory in Needville, Texas. This was a telebridge contact via station WH6PN in Hawaii.

Approximately 150 people attended and listened as Doug Wheelock, KF5BOC answered 12 questions about life in space posed to him by the youth.

As part of the event, scout troops set up an amateur radio station near the observatory to conduct their all-day Jamboree on the Air (JOTA) radio contacts and also worked on Radio Merit Badges.

The Brazos Valley Amateur Radio Club was on hand to assist with JOTA activities and prepared for afternoon satellite contacts with an Arrow hand-held antenna. Bruce, KK5DO and Allen, N5AFV, operated via AO-27 from the George Observatory observation deck. Bruce reported they had a bunch of adults waiting for the satellite. When they heard it start up they were thrilled. It was more fun when they started making contacts.

[ANS thanks the Southgate ARC site and Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-304.04
FP/KV1J Miquelon Island DXpedition on Satellites Until November 2

AMSAT News Service Bulletin 304.04
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.04

A few more days remain to catch Eric's FP/KV1J operation from the island of Miquelon (Grid GN17) until November 2. This is a French territory off the coast of Newfoundland.

Eric planned to mostly operate on the low bands but plans to take breaks and work as many of the FM satellite passes that he can. Look for him on AO-51, AO-27, SO-50, SO-67, and HO-68. His satellite gear includes an FT-817 and an Arrow 146/437-10 antenna.

Having operated from Miquelon previously in November, 2009 he is preparing for rough weather off of the North Atlantic ocean. His satellite operating will outdoors with the handheld Arrow. He will favor the daylight passes because it is easier to operate in these conditions.

Eric's web page at http://www.kv1j.com/fp/october10.html will be updated with his status time permitting and also depending when internet access is available.

[ANS thanks Eric, FP/KV1J for the above information]

/EX

SB SAT @ AMSAT $ANS-304.05
FUNcube User Group on Yahoo.com

AMSAT News Service Bulletin 304.05
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.05

AMSAT-UK's FUNcube is an educational single cubesat project with the goal of enthusing and educating young people about radio, space, physics and electronics.

The target audience consists of primary and secondary school pupils. FUNcube will feature a 145 MHz telemetry beacon that will provide a strong signal for the pupils to receive. A simple receiver board, the FUNcube Dongle, is also being developed. It is intended that this will be connected to the USB port of a laptop to display telemetry and messages in an interesting way for the students.

FUNcube will carry a UHF to VHF linear transponder that will have up to 1 watt and which can be used by Radio Amateurs worldwide for SSB and CW communications. Measuring just 10 x 10 x 10 cm, and with a mass of less than 1kg, it will be the smallest ever satellite to carry a linear transponder and the choice of frequencies will enable Radio Amateurs to use their existing VO-52, DO-64, HO68 and similar stations.

Interested amateur satellite operators are invited to join the growing user group to follow all the latest with the Funcube and the receiver board, the FUNcube Dongle. Join the user group at:
http://uk.groups.yahoo.com/group/funcube/

A video tour of the AMSAT-UK FUNcube simulator is now available. AMSAT-UK secretary Jim Heck, G3WGM shows the whole structure and the various components of FUNcube. The video is available on the SouthGate website at: http://tinyurl.com/28n424q

[ANS thanks Rob, M0TFO, AMSAT-UK, and SouthGate News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-304.06
Finnish Student Satellite Aalto-1

AMSAT News Service Bulletin 304.06
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.06

Aalto-1 is a student satellite project of Aalto University, Finland. When launched, it would be the first Finnish satellite.

It is planned to operate at VHF-UHF and there will also be an S-band transmitter. Up to 8 watts of power will be available from the Solar panels.

The main payload of the satellite is a novel tiny Fabry-Perot imaging spectrometer, developed by VTT, Finland. The primary scientific goal of the mission is to demonstrate the feasibility of MEMS Fabry-Perot spectrometers for space applications. This miniature technology can be used in nanosatellites for large a variety of remote sensing applications in the future. High spectral resolution images can be used for water quality monitoring and land use classification.

Aalto-1 was recently featured on Finnish TV and there is also a short video showing a graphic of the 3U CubeSat. The video clips can viewed on the South Gate ARC site at http://tinyurl.com/2dy4bqg

An Aalto-1 Discussion Forum in English can be found on-line at: https://wiki.aalto.fi/display/SatForum/Aalto-1+Discussion+Forum

[ANS thanks the SouthGate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-304.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 304.07
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.07

+ Congratulations to Bob, AJ5C for earning the ARRL Satellite Worked All States #321.

+ If you are within FM Satellite range of the Indian Ocean listen for possible operation by Matt, NM6W operating as S79RC between 31 Oct through 8 Nov from the Seychelles with an HT and Arrow antenna.

+ Armando, N8IGJ reported hearing UO-11 back on, at 0303UTC 30 October over the central US. UO-11 is only active when in sunlight. Its beacon operates on 145.826 MHz.

+ You can send your name to Mars via the NASA microchip project: http://tinyurl.com/yhaphmg (Clint, K6LCS)

+ Mike DK3WN is spearheading a project that broadcasts audio streams received by satellite operators around the world. Mike's most recent addition is Tetsu san, JA0CAW. Links to the satellite audio streams can be found on the DK3WN SatBlog: http://www.dk3wn.info/p/?page_id=17689

+ The ARRL's report of the recent AMSAT Space Symposium can be found on the ARRL web site at: http://tinyurl.com/2f3wfoa. ARISSat-1 is featured in this report.

+ AMSAT has received the sad news that Dr. David Clark, G6XYA from Manchester UK passed away.

+ Watch Patrick, WD9EWK/VA7EWK in action in this video clip shot by Adrian, AA5UK working HO-68 in FM mode outside of the AMSAT Space Symposium held earlier this month: http://tinyurl.com/29t7vov

+ Update your Keps for the ISS. The ISS orbit was boosted slightly on October 26 to avoid space debris.

+ AMSAT-NA VP Operations Drew KO4MA has posted a video of ARISSAT-1 and the AMSAT-UK FUNcube dongle receiver demonstrated at the AMSAT Space Symposium: http://www.youtube.com/watch?v=AgNM290k7-w

+ An AMSAT Forum at the Fort Wayne, Indiana Hamfest will be on Saturday, Nov. 13, at 1:15pm. For more info check the following: http://www.fortwaynehamfest.com (KA8QCU)

+ An interesting weather satellite photo of the October 26 superstorm that swept across North America can be viewed on the UniverseToday web site at: http://tinyurl.com/2bhx75r

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the time when Arnold Scwarzenegger was offered a role in a movie about the lives of classical music composers. Arnold said, "I'll be Bach."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

## 96. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-11-01 06:00:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1288591200@panix.com>
Source record: 399
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 97. Radio Meteor Obs. Bull. October 2010 Orionids

Newsgroup: rec.radio.amateur.space
Date: 2010-11-06 22:25:43 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <4elbd6d2e5gvm2e316qe6ttn408ghnaguh@4ax.com>
Source record: 400
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 207 of October 2010 (102 K) is available now as

http://www.rmob.org/rmobtext/rmob1010.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

## 98. ANS-311 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-11-10 02:09:30 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000001cb807c$4a928f10$dfb7ad30$@net>
Source record: 401
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-311

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* November AO-51 Schedule
* Hudson Valley SatCom Net
* November 15 Deadline for NASA CubeSat Initiative Proposal
* AMSAT-UK FUNcube Frequencies Now Confirmed
* FO-29 Status Update
* OSCAR-11 REPORT 31 October 2010
* ARISS Status - 1 November 2010

SB SAT @ AMSAT $ANS-311.01
November AO-51 Schedule

AMSAT News Service Bulletin 311.01
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.01

AMSAT-NA VP Operations, Drew KO4MA published the November schedule for AO-51. Drew wrote, "This month we are catching up on several requests for L, S and even 38k4 BBS time. In January AO-51 leaves continuous illumination for many years and many of these modes may not be possible due to power budget and battery condition. However, if we find these modes under used this month, we may modify the schedule as we go.

October 31 (late UTC)
FM Repeater, L/SU
Uplink: 1268.705 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM and 435.300 MHz FM (at low power!)

November 4 (late UTC)
FM Repeater, V/U

Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

November 14 (late UTC)
38k4 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 38,400 baud

November 18 (late UTC)
FM Repeater, L/SU
Uplink: 1268.705 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM and 435.300 MHz FM (at low power!)

November 21 (late UTC)
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

SO-67 is active over North and South America this month, according to the schedule at http://www.amsatsa.org.za/ . V/U users of AO-51 are encouraged to try SO-67 while AO-51 is in mode L/US.

Read the latest AO-51 Control Team News on the AMSAT web at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-311.02
Hudson Valley SatCom Net

AMSAT News Service Bulletin 311.02
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.02

The next Hudson Valley Sat com Net will be Thursday Noveber 11 on the Mt. Beacon ARC 146.970 MH repeater and on EchoLink via the N2EYH-L node. Net starts at 8PM EST (UTC - 5). More information is available at http://www.hvsatcom.org and wa2aqh@amsat.org.

[ANS thanks Stu, WA2BSS for the above information]

/EX

SB SAT @ AMSAT $ANS-311.03
November 15 Deadline for NASA CubeSat Initiative Proposal

AMSAT News Service Bulletin 311.03
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.03

NASA made the first open announcement to create an agency-prioritized list of available CubeSat auxiliary payloads in April 2010. Additional CubeSat launch capacity is still available in 2011 and 2012, so NASA released a second announcement of CubeSat integration and launch opportunities. CubeSat mission proposers must still be educational institutions and contribute to NASA strategic goals and outcomes.

Investigations proposed for this pilot project must address an aspect of science, exploration, technology development, education or operations encompassed by NASA's strategic goals and outcomes as identified in the NASA Strategic Plan and/or NASA's Education Strategic Coordination Framework.

Collaborators may be required to provide partial reimbursement of approximately $30,000 per CubeSat. NASA will not provide funding to support CubeSat activity or development. Selection does not guarantee an availability of a launch opportunity.

The complete CubeSat Launch Initiative Announcement can be viewed on-line at NASA.gov at http://tinyurl.com/2b97n6r.

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-311.04
AMSAT-UK FUNcube Frequencies Now Confirmed

AMSAT News Service Bulletin 311.04
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.04

Trevor, M5AKA reported the IARU Amateur Satellite Frequency Coordination panel has announced coordinated frequencies for the AMSAT-UK FUNcube 1U CubeSat.

The frequencies are:

Inverting linear transponder:
Uplink 435.080 - 435.060 MHz Downlink 145.960 - 145.980 MHz

Beacon 145.955 MHz CW and 1200 bps BPSK

FUNcube website
http://www.FUNcube.org.uk/

FUNcube SDR Dongle
http://www.FUNcubeDongle.com/

FUNcube Yahoo Group
http://groups.yahoo.com/group/FUNcube/

[ANS thanks Trevor, M5AKA and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-311.05
FO-29 Status Update

AMSAT News Service Bulletin 311.05
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.05

Yutaka Murata, JA1COU reported news from the Japan Amateur Radio League (JARL) FO-29 command team testing this past weekend when continuous commands were transmitted to the satellite when it was in range of Japan.

The current hypothesis of the recent shutdown of the satellite is that the temperature aboard FO-29 is too high to allow continuous operations and to accept commands or any other satellite operations.

Eclipse of FO-29 is:
November 1 0% (full illumination)
November 20 14%
November 30 17%

It is expected that the temperature aboard FO-29 will drop as the length of eclipse increases. FO-29 is designed to work over a wide temperature range. Because of degradation over time in orbit it is possible that some components may have lower performance. The JARL Command Team hopes that FO-29 will accept commands and resume operation when the temperature cools down during increased eclipse.

[ANS thanks Yutaka Murata, JA1COU for the above information]

/EX

SB SAT @ AMSAT $ANS-311.06
OSCAR-11 REPORT 31 October 2010

AMSAT News Service Bulletin 311.06
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.06

This report covers the period from 30 September to 31 October 2010. During this time the satellite has been heard from 09 to 19 October and from 30 October. At the time of writing it is

transmitting and is expected to continue until 09 November.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained only ten seconds in 33 days. This is comparable with its accuracy when the satellite was fully operational, when it gained approximately one minute per year. However, there is still an accumulated loss of 309 days, which has occurred during eclipses of the last few years.

Operation during eclipses and stability of the on-board clock suggest that some part of the system may have recently failed 'open circuit' thus reducing the overall power drain of the system, and allowing more power to be available during eclipses. There was an unexplained current drain observed when analogue telemetry was last transmitted. This fault might have cleared.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Reception reports have been received from Jeff N3QO, Rod CX2ABP and Ian KI4HLV/6Y5 (G4JMM) . Many thanks for those and to everyone who posted reports on the satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites. Strongly recommended for future reports! Reports around the expected times of switch-on and switch-off are of special interest. The URL is http://oscar.dcarr.org/index.php

OSCAR-11 transmits on 145.826 MHz., set receiver to NBFM. The satellite has a characteristic sound, rather like raspy slow morse code, sending "di di dah dah dah dah dah dah dah" sent over a period of five seconds. If you are receiving a very weak signal, switch the receiver to CW or SSB. You should hear several sidebands around the carrier frequency and should be able to hear the characteristic 'morse code like' sound on at least one sideband.

Please note that you need a clean noise-free signal to decode the signals, and your receiver must be set to NBFM mode, for a decoder to work.

If you need to know what OSCAR-11 sounds like, there is an audio clip on my website www.g3cwv.co.uk/ which may be useful for identification and as a test signal for decoding.

The current status of the satellite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. The real time clock is showing a large accumulated error, but is now incrementing accurately to within a few seconds per month. The day of the month has a bit stuck at 'one' so the day of the month may show an error of +40 days for some dates. The time display has switched into 12 hour mode. Unfortunately, there is no AM/PM indicator, since the time display format was designed for 24 hour mode.

The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed.

The watchdog timer operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations have shown this to be 20.7 days, ie. 10.3 day s ON followed by 10.4 days OFF.

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The last telemetry received from the satellite is available for download. The website contains an archive of news & telemetry data which is updated from time to time. It also contains details about using a sound card or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.g3cwv.co.uk .

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT150.CWV, to prevent duplication.

73 Clive G3CWV xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-311.07
ARISS Status - 1 November 2010

AMSAT News Service Bulletin 311.07
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.07

1. Successful ARISS Contact with Funakata Elementary

On Friday, October 29, an Amateur Radio on the International Space Station (ARISS) contact was held between students from Funakata Elementary School in Nagoya, Aichi, Japan and astronaut Shannon Walker, KD5DXB on the International Space Station (ISS). The youth were able to get in 16 questions before the ISS went over the horizon. Approximately seventy students, guests and media were present.

2. Astronaut Training Status

Astronauts Joe Acaba, KE5DAR and Aki Hoshide, KE5DNI participated in simulated ARISS school contacts with students attending Ralph McCall School in Airdrie, Alberta, Canada on Tuesday, October 26. The training sessions were terrestrial-based amateur radio contacts using ARISS equivalent equipment.

Acaba, who is slated to fly with Expedition 31, also had an ARISS refresher course on Wednesday, October 27 for his upcoming mission in 2012.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

# 99. REAL HOT SEX PHOTOS&VIDEOS

Newsgroup: rec.radio.amateur.space
Date: 2010-11-10 15:07:24 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <fd471b2f-36bd-40e9-b2c3-c7f469988e6e@37g2000prx.googlegroups.com>
Source record: 402

FOR SAVE WATER AND CHILD PROTECTION
http://savewaterinworld.blogspot.com

HOT COUPLE ROMANCE
http://babes-devi.blogspot.com/2010/11/couples-in-romance.html
PRANEEHA HOT PICS
http://babes-devi.blogspot.com/2010/11/praneetha-latest-pics.html
AISHWARIYA LATEST HOT PICS
http://babes-devi.blogspot.com/2010/10/aish-latest-pics.html
SOUTHACTRESS IN A SEXY TOWELS
http://babes-devi.blogspot.com/2010/10/south-actress-in-sexy-towels.html
UDAYATHRA IN A BATH ROOM
http://babes-devi.blogspot.com/2010/10/udayatara-in-bath.html
ACTRESS IN A HOT RED DRESS
http://babes-devi.blogspot.com/2010/10/actress-in-sexy-red-dress.html
ASIN CUTE HOT PHOTOS
http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html
SEXY CHARMI IN A BATH
http://babes-devi.blogspot.com/2010/06/charmi-in-bath.html
FOR HOT PHOTOS&VIDEOS
http://babes-devi.blogspot.com/2010_06_01_archive.html
HOT SEXY BOOBS SHOW
http://babes-devi.blogspot.com/2010/09/sexy-boobs.html
ASIN CUTE HOT PHOTOS
http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html
ANKHITA SPICY PHOTOS
http://babes-devi.blogspot.com/2010/08/sexy-ankhitha.html

## 100. Free Music To Use on Ya Radios

Newsgroup: rec.radio.amateur.space
Date: 2010-11-11 04:52:15 UTC
From: s s <staveinvaders@gmail.com>
Message-ID: <4b873e36-3710-44c6-a68a-49b0622e18e9@n32g2000pre.googlegroups.com>
Source record: 403

Music at

www.staveinvaders.com can be used for free for the next year.

Just download the mp3's

# 101. ANS-318 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-11-14 17:10:28 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001001cb841e$16ec2090$44c461b0$@net>
Source record: 404
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-318

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Amateur Radio Satellite Awards
* Live Web Cast From MFJ on November 16
* Hams Like Science: Impact Earth Simulator For Your Shack
* Hams Like Free Stuff: Download E-Book Understanding LF and HF Propagation
* K8OCL, Silent Key
* ARISS Status Report November 8, 2010

SB SAT @ AMSAT $ANS-318.01
AMSAT Amateur Radio Satellite Awards

AMSAT News Service Bulletin 318.01
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.01

AMSAT offer a range of Amateur Radio Satellite awards, starting with the single contact Satellite Communicator's Club.

On the AMSAT bulletin board Clint Bradford, K6LCS, writes:

AMSAT has offered several awards over the years.
And you do not need 100 contacts to get awarded for your accomplishments:
a single documented satellite contact qualifies you for the AMSAT Satellite Communicator's Club award!

Current and past AMSAT awards include ...

-Satellite Communicator's Club
-Satellite Communications Achievement
-South African AMSAT Award
-OSCAR Sexagesimal Award
-OSCAR Century Award

-WA4AMI 1000 Award
-WA4AMI 5000 Award
-51 on 51 Achievment Award

Details on the AMSAT awards available at ...
http://www.amsat.org/amsat-new/awards/

In addition, the ARRL recognizes satellite efforts, too, with their
WAC, DXCC, WAS, and VUCC awards.

- Worked All Continents Award (WAC) - Make one satellite contact with
any station on each of the six continents.

- DXCC Award with Satellite Endorsement - Make one satellite contact
with any station in 100 different DXCC countries.

- Worked All States Award - Make one satellite contact with any station
in each of the 50 states.

VHF/UHF Century Club Award - Make one satellite contact with any station
in 100 different grid squares. Endorsements for each additional 25 grid
squares.

ARRL Awards information -
http://www.arrl.org/awards/

AMSAT Awards information -
http://www.amsat.org/amsat-new/awards/

Congratulations to these hams who have recently earned their VUCC Award
with a Satellite Endorsement:

VUCC Satellite #203 Bob Herrell, AJ5C
VUCC Satellite #204 Zack Beougher, KD8KSN
VUCC Satellite #205 Greg Butler, KI4OTG

[ANS thanks AMSAT-NA for the above information]

/EX

SB SAT @ AMSAT $ANS-318.02
Live Web Cast From MFJ on November 16

AMSAT News Service Bulletin 318.02
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.02

Tom, W5KUB will run a live web broadcast giving you a video guided tour of
MFJ, Cushcraft, Hygain, Ameritron, Mirage, and Vectronics on Tuesday,
November 16, starting at 0800 Central Standard Time, or 1400 UTC. Prizes
will be given to lucky viewers. All you have to do is be logged in to be
eligible for the drawings.

You can log into view the web video and join the on-line hamradio chat via Tom's web page at: http://w5kub.com. You can also join the live chat by pointing your IRC client to /server irc.liveharmony.org and then /join #hamradio.

Tom, W5KUB is well known for his live internet web casts from Dayton and from the Huntsville Hamfest every year.

[ANS thanks Tom, W5KUB for the above information]

/EX

SB SAT @ AMSAT $ANS-318.03
Hams Like Science: Impact Earth Simulator For Your Shack

AMSAT News Service Bulletin 318.03
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.03

UniverseToday.com reported on Impact Earth, an interesting web page for scientifically oriented readers who may like to predict the effects of an asteroid impact before it happens.

All you have to do is input the parameters of the asteroid on the recently updated "Impact Earth" website:
http://www.purdue.edu/impactearth

You'll find out everything about what an impactor will do to Earth, including an estimate of the size of the crater, how far away you'll need to be in order to avoid being affected by the impact (and if that is possible), tsunami wave height, and other details of the subsequent disaster. This version does not predict if your amateur radio antenna will remain standing.

The original Impact Earth website was created in 2002 for use by NASA and homeland security. The new version, built in a collabora- tion between Purdue University and Imperial College London, is more user-friendly for the general public, as well as providing more visual details of an impact. Besides being rather fun to play around with, the website is highly educational about what a various sized impacts would do Earth, depending on if it hit ground or water.

[ANS thanks UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-318.04
Hams Like Free Stuff: Download E-Book Understanding LF and HF Propagation

AMSAT News Service Bulletin 318.04
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.04

Steve G0KYA and Alan G3NYK, of the Radio Society of Great Britain's (RSGB) Propagation Studies Committee, have released a free ebook called 'Understanding LF and HF Propagation'

In 2008/2009 Steve and Alan wrote a series of features on LF and HF propagation for the RSGB's "RadCom" magazine.

The features consisted of a month-by-month look at each HF band in turn, showing the reader the propagation modes behind each band and explaining some of the technicalities of ionospheric propagation.

Steve says: "I looked at the D, E and F layers, Sporadic E, the MUF/LUF, using solar data, propagation programs, NVIS and much more.

"Alan then took over and wrote three detailed features on LF propagation. We are told that the features were well received and as a result I have managed to persuade the RSGB to allow me to put them together into a single document, which is now freely available for amateurs worldwide to download."

You can download your free copy of "Understanding LF and HF Propagation" at http://www.g0kya.blogspot.com

[ANS thanks the SouthGateARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-318.05
K8OCL, Silent Key

AMSAT News Service Bulletin 318.05
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.05

Dee Interdonato, NB2F wrote this week, "It is with great sadness that I report Dr. John Champa, K8OCL, has become a silent key. I was friends with John since 1970 as we both served in the U.S. Army and were officers in the Ft. Gordon, Ga. Amateur radio club. His daughter, Rebecca, reported his passing after a formidable fight with an inoperable tumor."

John was on the BOD of AMSAT for several years and will be remembered for his significant contribution to Amateur Radio in Space. Dee concluded, "He will be missed by all and his important opinions (to me) will allow me to keep his ideas alive and in the hearts of all AMSAT members."

[ANS thanks Dee Interdonato, NB2F, for the above information]

/EX

SB SAT @ AMSAT $ANS-318.06
ARISS Status Report November 8, 2010

AMSAT News Service Bulletin 318.06
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.06

1. Upcoming School Contact

St. Louis Charter School, St. Louis, Missouri contact on Thursday, November 11 at 18:07 UTC. was a success St. Louis is a public charter school with an enrollment of 930 students in grades K - 8. Additional students are enrolled in the school's Special Education Self Contained Classrooms. The school has integrated the ARISS contact into its science curriculum which covers the solar system, space exploration and space missions. Students have taken part in several hands on activities and research papers to prepare for the contact.

2. Malaysian Contact Successful

On Tuesday, November 2, students from S.K. Bukit Damansara visited the National Planetarium in Kuala Lumpur, Malaysia and participated in an Amateur Radio on the International Space Station (ARISS) contact. The youth posed questions to astronaut Doug Wheelock, KF5BOC about what it is like to live in space. The contact was made in conjunction with the "Prime Minister's - National Space Challenge Trophy 2010" event.

3. Crew Debrief Held with Caldwell-Dyson

Expedition 23/24 astronaut Tracy Caldwell-Dyson, KF5DBF participated in an Amateur Radio on the International Space Station (ARISS) debrief session on Wednesday, November 3. The feedback she provided on the ISS Ham radio equipment and school contacts will aid the ARISS team in updating its program procedures.

4. Astronaut Training Status

On Friday, November 5, Aki Hoshide, KE5DNI was given an ARISS overview training session and Suni Williams, KD5PLB was provided with a refresher course on the ARISS program. Both astronauts are slated to fly on Expedition 32.

5. Amateur Radio Newsline Covers ARISS

On November 5, the Amateur Radio Newsline Report 1734 ran three ARISS related news items under Ham Radio in Space. "The ISS Celebrates its 10th Anniversary" talks about the crew members who have flown on the Space Station, many of whom were ham radio operators. "Second Ham Station for the ISS" covers the Ericsson radio which will be installed in the Columbus module in early 2011 and "ARISSat-1 Passes Safety Test" is a status on the satellite which will soon ship to Russia for final integration and testing. All stories may be found at:
ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Yutaka Carol, KB3LKI for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

## 102. WSR-319 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-11-16 23:48:39 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001c01cb85e8$c2432bc0$46c98340$@net>
Source record: 405
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-319.S1
WSR 319 Part 1 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S1
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11152010]
=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-319.S2
WSR 319 Part 2 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S2
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK

Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====

KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:

PBBS: L/u
Uplink: 1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11152010]

=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939

Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-319.S3
WSR 319 Part 3 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S3
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====

DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB

U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM

1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM

145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575

Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====

RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-319.S4
WSR 319 Part 4 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S4
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

# 103. ANS-325 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-11-21 02:39:14 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001b01cb8925$435d62e0$ca1828a0$@net>
Source record: 406
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-325

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* CubeSat Launch Includes Amateur Radio Missions
* AMSAT Rolls Out Web Fund Raising Widgets
* FUNCube Comes to Life at Martlesham, First Command & Telemetry Success
* WAS-Satellite Certificate Now Accepted as Credit for AMSAT Awards
* FO-29 Returns to Service
* Satellite Shorts From All Over
* CubeSat Winter Session and IAA Conference in Rome, January 24-29

SB SAT @ AMSAT $ANS-325.01
CubeSat Launch Includes Amateur Radio Missions

AMSAT News Service Bulletin 325.01
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.01

A Minotaur-4 launch from the Kodiak Launch Complex in Alaska, managed by Alaska Aerospace Corp. on November 19 lifted seven satellites into a 400 mile high circular orbit.

Four of the satellites will be of interested to amateur radio operators:

+ FASTRAC (science and amateur radio mission)
+ RAX - Radio Aurora eXplorer (science and amateur radio mission)
+ NanoSail-D
+ O/OREOS

FASTRAC
-------
http://fastrac.ae.utexas.edu/for_radio_operators/overview.php

Status: Beacon copied and decoded after launch.

The FASTRAC mission consists of two satellites built by students at UT-Austin. This mission is divided into two basic phases, both phases relying heavily on the participation of the amateur radio community.

The first phase is the science portion of the mission. During this phase the two satellites will be sharing GPS data as long as they are within range of each other. The GPS data will be processed on board each satellite and then stored in flash memory to calculate an on-orbit relative navigation solution.

Also, the satellites will be performing attitude determination with the GPS receiver. FASTRAC 1 will be firing the micro-discharge plasma thruster whenever the thrust vector is within 15 degrees of the anti-velocity vector. The data will be relayed to the ground when the satellite is in communication with a ground station. A coordination plan is being developed so that participating amateur radio ground stations can play a major role in collecting this data and relaying it back to the FASTRAC web site.

The second phase of the mission begins by reconfiguring the satellites for use by the amateur radio community. The capabilities of these satellites are governed largely by the functionality of the Kantronics KPC9612-Plus TNC. The satellites will be reconfigured after the primary mission to serve on the APRS network.

FASTRAC 1 "Sara Lily" FASTRAC 2 "Emma"
---------- ----------
Downlink 437.345 MHz FM 145.825 MHz FM
Beacon 437.345 MHz* 145.825 MHz*
Uplink (1200 Baud) 145.980 MHz FM 435.025 MHz FM
Uplink (9600 Baud) 145.825 MHz FM 437.345 MHz FM
* AX.25 1200 AFSK beacon data format

RAX (Radio Aurora eXplorer)
---
http://rax.engin.umich.edu/
Status: Beacon copied and decoded after launch.

RAX is a space weather science spacecraft carrying a 9600 baud UHF transceiver that will transmit telemetry in the amateur satellite bands. This mission also consists of a primary scientific experiment with future reconfiguration for amateur radio experimentation.

In the science phase the satellite will use a a radar receiver capable of 1 MHz I/Q sampling of select bandwidths between 400-500 MHz, including the amateur satellite bands.

The primary objective of the mission is to use the onboard radar receiver in conjunction with a powerful radar station in Alaska to study the formation of a plasma anomaly known for causing the scintillation

of radio signals in the UHF and higher bands. This scintillation effect is known to inhibit our space radar tracking capabilities and ground-space communications.

The RAX team is looking for amateur ground stations to help acquire RAX's 437.505 MHz beacon during the next few weeks of early launch and continue to help collect telemetry throughout the mission.

The amateur radio phase of the mission is still under development. The RAX team will invite the AMSAT community to get involved with submitting proposals on how the radar receiver could be used for amateur radio

experiments after the primary mission objective is achieved. They will issue a call for proposals which will be posted to the AMSAT-BB in the next few months.

NanoSail-D
---
http://www.nasa.gov/mission_pages/smallsats/nanosaild.html

NanoSail-D is a test of solar sail mechanism technology. The solar sail is designed to operate predominantly as a drag sail and will cause it to de-orbit in less than 100 days as a test of small satellite de-orbiting techniques. The amateur radio beacon will transmit a one-half second data signal every 5 seconds on 437.270 MHz. The satellite will operate primarily on battery power because of the short duration of the mission.

O/OREOS
---
http://www.nasa.gov/mission_pages/smallsats/oreos/main/index.html
Status: Beacon copied and decoded after launch.

O/OREOS is a biological test spacecraft developed by scientists and engineers at NASA Ames Research Center. O/OREOS is a triple cube spacecraft planned to perform two tests during its 1-year mission. The first experiment will test how microorganisms survive and adapt to the stresses of space; the other will monitor the stability of organic molecules in space. O/OREOS includes an amateur radio beacon operating on 437.305 MHz. This satellite also includes a novel de-orbit mechanism design by a Santa Clara University graduate student.

AX.25 437.305 MHz O/OREOS Beacon decoding information:
http://beacon.engr.scu.edu/BeaconProcessingSystem/OOREOSBeaconDecoding.pdf

If you are able to capture the beacon telemetry, please take the time to file a report at http://beacon.engr.scu.edu/Submission.aspx which is an interface to the Beacon Data Processing System.

An overview of the Kodiak launch can be found on-line at:
http://www.spaceflightnow.com/minotaur/stps26/101112launchpreps/

Photos of the payloads during integration with the launcher can
be found on-line at:
http://spaceflightnow.com/minotaur/stps26/101112cleanroom/

[ANS thanks the CubeSat Teams and SpaceFlightNow.com for the above
information]

/EX

SB SAT @ AMSAT $ANS-325.02
AMSAT Rolls Out Web Fund Raising Widgets

AMSAT News Service Bulletin 325.02
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.02

AMSAT-VP Operations Drew Glasbrenner, KO4MA announced AMSAT is now
using a new web based fund raising tool on Facebook called Fundrazr
along with a web widget from PayPal Labs you can add to other web
pages. He hopes this will stimulate additional fund raising support
for ARISSat-1 and AMSAT-FOX. He is looking for help rolling these
web page widgets out to the public. Both are designed to be spread
virally and attract donations from those outside the normal AMSAT
circles.

For those with private webpages or blogs, we have a PayPal widget that
can also be added to your own webpages and blogs. It has been added to
the front page at http://www.amsat.org . Please consider adding it to
your own webpages and blogs in a prominent place.

Drew concludes, "I'm proud to announce that the Facebook and PayPal
widget campaign has raised $1,000 over the last 48 hours! This is a
great first step towards replenishing the funds used in the construc-
tion of ARISSat-1, and beginning the design and construction of
AMSAT-FOX. Thank you to those who posted the fundraiser to their own
pages, and to those who donated."

Drew's Facebook page at http://bit.ly/c861N7 now prominently includes
the Fundrazr widget that you can share or post. Drew has also added
the PayPal Labs widget on his QRZ.com entry, see:
http://www.qrz.com/db/KO4MA or http://www.qrz.com/db/K9JKM

For the FundRazr app on Facebook, go to Drew's Facebook page and click
share. For the PayPal widget on all other web sites, use the "add to
site" button. It will prompt you how to do it. It also lets AMSAT see
who and where it has been posted, and how much money has been raised
from each location.

Please let Drew know if you add either of these so he can track results!
(e-mail: ko4ma@amsat.org)

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-325.03
FUNCube Comes to Life at Martlesham, First Command & Telemetry Success

AMSAT News Service Bulletin 325.03
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.03

The UK Martlesham Microwavers Round Table weekend also included an AMSAT-UK FUNCube developer meeting. The aim of the working session was to build a `stack' of the various boards which will make up FUNcube and see if they worked!

Congratulations are in order to the FUNCube team being able to report success on these milestones:

+ Prove that we could command the satellite remotely via RF.
+ Receive and examine the telemetry from the stack remotely using the FUNcube dongle.
+ Command the antennas to deploy.
+ Command the satellite to change modes between transponder mode to education mode, and back again.

The main 'new' PCBs that arrived were David's PA, Wouter's RF board, and the CCT board from Jason and his team.

Photos of the meeting and FUNCube construction and testing videos can be viewed on-line at:
http://funcube.org.uk/working-meetings/cubesat-mtg-1314-nov-2010/

A screenshot of the first captured telemetry from FUNCube can be seen on-line at: http://www.funcubedongle.com/?p5

The Spectravue plot to the right shows the satellite's downlink received

using a FUNcube Dongle. To the right hand side of the plot, the solid green `hump' is the telemetry and the signal to the right of that being simultaneous transponded SSB voice traffic.

To the bottom left, old hands will recognise the AO-40RCV window being used to decode raw frames. The basic telemetry specification is based heavily on AO-40's FEC model.

[ANS thanks the AMSAT-UK FUNCube developers and Howard, G6LVB for the above information]

/EX

SB SAT @ AMSAT $ANS-325.04
WAS-Satellite Certificate Now Accepted as Credit for AMSAT Awards

AMSAT News Service Bulletin 325.04
>From AMSAT HQ SILVER SPRING, MD.

November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.04

AMSAT Director of Contests and Awards Bruce Paige, KK5DO says congratulations are in order for these radio amateurs who earned operating awards this month:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:
Club Station, SP9PEX
Rick Tejera, K7TEJ
Merle Olmsted, AA4QE
Zachary Beougher, KD8KSN
George Heath, KF5IRG
Anthony Sirianni, Sr., KD8OEE

The following have earned the AMSAT Communications Achievement Award:
Ronald Oldham, N8RO #521
Ryan Case, KB9RID #522
Merle Olmsted, AA4QE #523
Zachary Beougher, KD8KSN #524

The following have earned the South Africa AMSAT Communications Achievement Award:
Ronald Oldham, N8RO #US152
Bob Herrell, AJ5C #US153
Ryan Case, KB9RID #US154
Merle Olmsted, AA4QE #US155
Zachary Beougher, KD8KSN #US156

The following have earned the AMSAT Sexagesimal Award:
Ronald Oldham, N8RO #154
Zachary Beougher, KD8KSN #155
Bob Herrell, AJ5C #156
Terry Moorby, VE3DIJ #157

The following have earned the AMSAT Century Club Award:
Nick Kucij, KB1RVT #40

The following have earned the W4AMI 5000 Satellite Communications Achievement award:
Zeljko Ulip, 9A2EY #25

Bruce also said that in some cases he can credit holders of the ARRL Worked All States (with the Satellite endorsement) toward appropriate AMSAT Satellite Operating Awards. He will accept a scanned copy of your Worked All States-Satellite certificate as proof of 50 of the 60 contacts to fill in the missing states for the AMSAT Sexagesimal Award or to qualify for the AMSAT Communication Achievement Award. Contact Bruce via e-mail (kk5do@amsat.org) with your specific details to see if you qualify.

Unfortunately, the ARRL W.A.S. certificate cannot be used towards the South Africa AMSAT Award. As all contacts for this award must be done on

LEO satellites, there is no way to determine if LEO or HEO was used on the certificate.

Full information on all of the AMSAT Satellite Operating Awards can be found on-line at: http://www.amsat.org/amsat-new/awards/

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-325.05
FO-29 Returns to Service

AMSAT News Service Bulletin 325.05
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.05

Mineo Wakita, JE9PEL reported that the FO-29 Command Team succeeded in bringing FO-29 back in service on 07:46UTC, 16 Nov 2010. Good signals have been reported. Rick, WA4NVM reported, "I caught Kerry, WC7V with a booming signal at 2 degrees elevation. Its nice to hear this bird again!"

Two weeks ago, Yutaka Murata, JA1COU reported that the JARL FO-29 command team hypothesized that recent shutdowns of the satellite may have been caused when the temperature aboard FO-29 became too high to allow continuous operations and to accept commands or any other satellite operations.

The FO-29 command team expected that the temperature aboard FO-29 would drop as the length of eclipse increases:

Eclipse of FO-29 is:
November 1 0% (full illumination)
November 20 14%
November 30 17%

[ANS thanks Mineo Wakita, JE9PEL and Yutaka Murata, JA1COU for the above information]

/EX

SB SAT @ AMSAT $ANS-325.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 325.06
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.06

+ An article and accompanying video on the SouthGate Site shows how terrestrial operation can impact satellite operations when the operators unwisely choose their frequency: http://tinyurl.com/24r4bdx (SouthGate)

+ Congratulations to Loren, K7CWQ on being awarded Satellite WAS #323 from the ARRL. His first contact was on 11-6-2009 with K8YSE. All of his contacts have been with an HT and an Arrow antenna from his driveway.

+ NASA and the National Institute of Aerospace have launched a new planetary rover engineering competition called Exploration Robo-Ops Student Challenge. University teams are eligible to win as much as $10,000 for designing and building a planetary rover. Teams are required to submit a project plan proposal by Dec. 15. More info can be found at SpaceDaily.com http://tinyurl.com/28nsglr

+ Tom, W5KUB was on Memphis, TN Channel 5 news with his amateur radio contact with the ISS. Video at http://tmedlin.com/iss.wmv

+ ReadySat Go is a store-and-forward CubeSat being developed by students at San Jose State University. They have posted a video showing construction of the satellite on the SouthGate site: http://tinyurl.com/274f7wq

+ NASA's Eyes on the Solar System is a browser application that gives you a 3D environment operating in real time, so you can virtually tag along with our robot spacecraft. More information and the stuff you need to download can be found at: http://solarsystem.nasa.gov/eyes/

+ Check out the Ten Years Of the ISS in Pictures feature on-line at UniverseToday.com ... http://tinyurl.com/27nglfh

+ The Daily Mail had a feature showing astronaut Tracy Caldwell Dyson and the views from the ISS Cupola: http://tinyurl.com/38eryox

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-325.07
CubeSat Winter Session and IAA Conference in Rome, January 24-29

AMSAT News Service Bulletin 325.07
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.07

The 1st IAA Conference on University Satellites Missions and Cubesat Conference which will be held in Rome, Italy on January 24-29, 2011. Submissions are due by December 18, 2010. Early registration begins on January 10, 2011.

The conference is organized by a team of professors, students and researchers from the School of Aerospace Engineering of Sapienza University of Roma (GAUSS - Gruppo di Astrodinamica dell'Universit&#65533; degli Studi Sapienza - Group of Astrodynamics of Sapienza University)

The Conference is supported by several authorities including:
+ The International Academy of Astronautics (IAA)
+ The European Space Agency (ESA)
+ Kosmotras)
+ The Von Karman Institute (VKI)
+ The Centro Ricerche Progetto San Marco
+ Sapienza Universit&#65533; di Roma
+ Morehead State University

Two days of the Conference will be entirely dedicated to the Winter Session of the Cubesat Workshop, for the first time in Europe.

More information can be found at: http://www.gaussteam.com under the section 'events'. An e-mail contact for the conference is: gauss.group@gmail.com

[ANS thanks Group of Astrodynamics, Sapienza University of Roma for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind the young ham expressing his frustration of his radio battery dying so his therapist recommended that he find an outlet.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

# 104. [RAC-Bulletin] RAC-News: Lanark ARES Balloon Launch 2010-11-20

Newsgroup: rec.radio.amateur.space
Date: 2010-11-23 21:16:26 UTC
From: rac-bulletins@eton.ca
Message-ID: <4CEC2EEB.9010001@rac.ca>
Source record: 407
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.info

Lanark ARES Balloon Launch 2010-11-20

(Via: Norm Rashleigh, VE3LC - RAC VP Industrial Liaison)

The Lanark Amateur Space Agency comprised of members of the Lanark North Leeds ARES Group launched an Amateur High Altitude Balloon from Perth Ontario on 20 November 2010. This launch undertaken by VA3ZKS, VE3ZBO, VA3KAI, VE3BSB and Zach McCracken the son of VA3ZKS was an attempt at the world height record for amateur balloons.

The flight was designated LASA 8 and transmitted as VE3REX-11 via APRS. VHF transmitted flight parameters including location, height, direction and speed were picked up by the extensive network of APRS digipeaters and gated to the internet so that Amateurs could follow the flight in real time. Feed back indicates that the flight had a large following.

Following the launch, chase cars which included VA3ZKS, VA3ZBO, VE3BSB, VE3OAX, VE3ICF and VE3JGL tracked the flight on in car computers equipped with VHF receivers, tncs and the UI View tracking program.

VA3QV of Ottawa ARES organized a group of amateurs to provide down range communication support to assist the chase cars with additional tracking and recovery. Thanks to VA3NPL of Prescott-Russell ARES, VE3AFV of Seaway Valley ARES, VE3XID and VE3RMJ for their patient monitoring of the down range repeaters and the HF comms frequency.

The tracking transmitter package included a Garmin 18 LVC GPS an Argent Data Surface Mount Open Tracker and a 300 miliwatt MX 146 transmitter. Power was provided by 3 AA batteries outputting 5.4 volts at launch.

VE3REX-11 attained a record setting altitude of 39,899 meters or 130,903 feet before bursting and descending by parachute to land in Jay, Maine. The balloon reached speeds of 256 kilometres per hour and travelled a flight distance of 598 kilometres.

VA3ZKS and VA3ZBO located the flight package during the evening by picking up beacons directly from the flight package which had landed in a tree a few meters from the edge of a river. They returned in the daylight to retrieve the package and return to Perth.

The flight package contained a picture of John W1AKV who had assisted the Vermont recovery of LASA 7 launched 7 Nov 2009. John who was 90 and became a silent key 7 Nov 2010. The picture is being sent as a

memoriam to his friend K1XV in Vermont

Many thanks to all Amateurs and Clubs that have shown an interest in
this aspect of Amateur Radio and have provided financial support for
the flight consumables.

73 Barrie VE3BSB

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* * * *

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You are receiving this bulletin because you are subscribed to an electronic mailing list.
For more information or to change your subscription please visit:
http://rac.eton.ca/racbullemail.htm

# 105. WSR-328 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-11-24 14:38:20 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001301cb8be5$30a65590$91f300b0$@net>
Source record: 408
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-328.S1
WSR 328 Part 1 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S1
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM

437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-328.S2
WSR 328 Part 2 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S2
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S2

O/OREOS
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11242010]
=====
Rax-1 Radio Aurora Explorer

Catalog Number:
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11242010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac 2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]

=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002

Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)

Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM

Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:
Commander: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI
Flight Engineer: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-328.S3
WSR 328 Part 3 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S3
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK

Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-328.S4
WSR 328 Part 4 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S4
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

# 106. ANS-332 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-11-28 14:29:39 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cb8f08$a900bfa0$fb023ee0$@net>
Source record: 409
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-332

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* FASTRAC Tracking Assistance Requested
* Antarctic Satellite Operation Planned From M/V Kapitan Khlebnikov
* AMSAT at the Tampa, FL Hamfest
* AMSAT at the 2010 Superstition Hamfest, Mesa, AZ
* Bill Ress, N6GHZ, appointed AMSAT Director of Launch Opportunities
* ESA to Sponsor Student Participation in IAA Conference in Rome
* Satellite Shorts From All Over
* ARISS Status - 22 November 2010

SB SAT @ AMSAT $ANS-332.01
FASTRAC Tracking Assistance Requested

AMSAT News Service Bulletin 332.01
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.01

Sebastian Munoz, KE5FKV, FASTRAC Student Program Manager, reports that last Friday 19 November 2010 the FASTRAC satellites (Emma and Sara Lily) were launched from Kodiak, AK. At this point the FASTRAC Team has been able to determine that both of them are beaconing and that they are talking to each other from their own station and with the help of HAMs all over the world.

They have been able to decode both Sara Lily and Emma's beacons and some of their crosslink data exchanges. From these they have been able to determine that their primary sensor, a GPS receiver is working properly.

At this point Emma's beacon has reverted to its default configuration where the satellite beacons at 9k6 every two minutes while Sara Lily

is continuing to beacon at 1k2 baud every three minutes. Also at this point Sara Lily's signal appears to be weaker than Emma so they are asking the HAM community to help track both of them.

To do so it is recommended that you first try to hear FASTRAC-2's (Emma's) beacon which is on 145.825 MHz and then switch to see if you can listen for FASTRAC-1's (Sara Lily's) beacon which is on 437.345. You might also be able to hear the girls talking to each other at 9600 baud. The type of beacons that you should get if you are able to decode

them, should look something like this:

FAST1>BEACON/1: <UI>:
F11001611484723.998635824658.10 +3888795.01 -567497.09 -1500.24821 +1194.21584 -7135.59277+0330282372 056 033 032 032 048

FAST2>BEACON/2: <UI>:
FAST2 Safe Mode

Stations not set up to receive packets, can send an audio file for attempted decoding.

Current TLE's as of 25 November:

FASTRAC
1 90025U 0 10327.90121560 -.00000191 +00000-0 -19331-4 0 00099
2 90025 071.9702 131.7903 0018126 299.0783 060.8722 14.76368636000560

A single TLE can be used to track both satellites as Emma and Sara Lily are currently stacked together.

The FASTRAC website will be updated with the most current TLEs
http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/predictedor
bit
.php

If you track the satellites, please let the FASTRAC team know through their website:
http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/index.php
or at fastracsats@gmail.com.

If your station has powerful transmitting capabilities on both 145.825 MHz
and 437.345 MHz and you are able to track the satellites, please let the

team know as you might be able to help them establish a command link which
they are still in the process of doing.

[ANS thanks Sebastian, KE5FKV, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.02
Antarctic Satellite Operation Planned From M/V Kapitan Khlebnikov

AMSAT News Service Bulletin 332.02
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.02

Herb, AA2PI plans amateur satellite operation during his voyage aboard the polar-class Russian ice breaker Kapitan Khlebnikov as it sails a route circumnavigating Antarctica from the Falkland Islands to Hobart, TZ.

The itinerary is:
Depart Falkland Islands on December 4, 2010
Arrive Hobart, TZ on Jan 3, 2011

[ANS thanks Herb, AA2PI and Bill K7MT for the above information]

/EX

SB SAT @ AMSAT $ANS-332.03
AMSAT at the Tampa, FL Hamfest

AMSAT News Service Bulletin 332.03
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.03

AMSAT will have a booth at the Tampabay Hamfest coming up on 4 December in Palmetto, Florida. AMSAT will also be doing 90 minutes of presentations on satellites and ARISS during a forum on Saturday. Please come by

to pick up the latest AMSAT gear, learn about ARISSat-1, FOX, and other projects, make a donation, or join or renew your AMSAT membership.

Andrew Glasbrenner, KO4MA, AMSAT's VP of Operations reports that he will

also be trying something new. For each donation of $25 or more, or each membership or renewal, Drew will personally provide the parts and help assembling an antenna for operating the satellites. We will be building a version of the CJU antenna in the booth, which is a small but very effective antenna to use with an HT to copy the Mode J satellites.

Using the CJU and an HT, and the 2m radio in your car, the Mode J satellites are easy to use. Drew requests that people interested in building the antenna contact him ahead of time for details or to RSVP for this offer.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.04
AMSAT at the 2010 Superstition Hamfest, Mesa, AZ

AMSAT News Service Bulletin 332.04
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.04

The Superstition Amateur Radio Club will host its annual hamfest on the morning of Saturday, 4 December 2010. The hamfest is located in the southwest parking lot of Mesa Community College, along the east side of Dobson Road between Southern Avenue and the US-60 freeway in Mesa, Arizona. Additional information about the hamfest, including talk-in frequencies, is available at: http://wb7tjd.org/hamfest

AMSAT will have a table at this hamfest, and Patrick Stoddard, WD9EWK, will be on the air for demonstrations using various satellites. The hamfest is in grid DM43bj.

[ANS thanks Patrick, WD9EWK, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.05
Bill Ress, N6GHZ, appointed AMSAT Director of Launch Opportunities

AMSAT News Service Bulletin 332.05
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.05

AMSAT President Barry Baines, WD4ASW has appointed Bill Ress, N6GHZ of Camino, CA as AMSAT's Director of Launch Opportunities, a new position. The appointment was announced at the AMSAT BOD meeting and AMSAT Annual Meeting that was held last month in Elk Grove Village, IL. In his capacity as Director of Launch Opportunities, Bill will serve as the central point for managing:

+ Fox Launch Opportunities
+ Ride Share Opportunities
+ AMSAT Presence at small satellite conferences

Supporting Bill's efforts will be a volunteer task force to help coordinate and compile launch information. Working with the VP-Engineering and AMSAT President, the Director will make recommendations to the AMSAT

BOD to develop launch objectives and serve as the central point for securing feasible launches for AMSAT spacecraft.

AMSAT President Barry Baines, WD4ASW noted Bill's qualifications for this position. "As a former BOD member who chaired the Engineering Task Force that developed the recommendation to the AMSAT Board of Directors to build a cubesat('Project Fox'), Bill understands AMSAT's strategic vision, our current capabilities and the current state of flight options.
His professional contacts and location on the West Coast places him in

an excellent position to identify and nurture potential launches, a significant task that requires an appreciation of both AMSAT and the state of the launch industry."

Bill and his team will be working to establish dialog with both satellite
customers who may have ride share potential a well as satellite builders

to evaluate potential ride share potential. The team will also evaluate

and determine how best for AMSAT to respond to NASA Launch Initiatives, other launch provider announcements, and potential university relationships for securing launches as these opportunities arise.

Individuals who become aware of potential launch opportunities which might be of interest to AMSAT are encouraged to contact Bill at his e-mai (n6ghz at amsat.org).

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.06
ESA to Sponsor Student Participation in IAA Conference in Rome

AMSAT News Service Bulletin 332.06
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.06

The 1st International Academy of Astronautics (IAA) Conference on University Satellites Missions and Cubesat Conference which will be held in Rome, Italy on January 24-29, 2011. Submissions are due by December 18, 2010. Early registration begins on January 10, 2011.

The Gruppo di Astrodinamica Universit&#65533; degli Studi Sapienza is pleased to announce that ESA has kindly offered ten scholarships for students who will present a paper at the 1st IAA Conference on University Satellites Missions and Cubesat Conference next January. You can find the information at the following link:
http://tinyurl.com/25wouy5

Arrangements have been made for student housing at the Conference:
http://tinyurl.com/26jybsx

The Gruppo di Astrodinamica and the IAA hopes that this will encourage students to participate in the Conference.

[ANS thanks the Gruppo di Astrodinamica Universit&#65533; degli Studi Sapienza
the IAA for the above information]

/EX

SB SAT @ AMSAT $ANS-332.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 332.07
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.07

+ Art, W4ART has published a link to the photos he took at the
2010 AMSAT Space Symposium and Annual General Meeting:

http://www.afeller.us/Studio_dArt/Personal_Galleries/Pages/AMSAT_2010.htm
l
Additional photos and captions will be published in the AMSAT
Journal.

+ Project Engineer for ARISS, Kenneth, N5VHO wrote, "For all you
that wonder what it is like for the astronauts to work ground
stations during a general pass. Col. Wheelock gives you a personal
video tour of the ISS ham radio station while he answers calls
from operators on the ground." Watch at:
http://www.youtube.com/watch?v&#65533;3EYcyszf8

+ Membership of the FUNcube satellite and Software Defined Radio
(SDR) Dongle Yahoo Group has now reached the 100 mark. You can
join the FUNcube Yahoo Group at:
http://groups.yahoo.com/group/FUNcube/

+ A photo gallery of the Minotaur launch from Alaska that launched
a payload of seven satellites can be viewed at:
http://spaceflightnow.com/minotaur/stps26/101120gallery/

+ Captain Yuri Bodrov, Master of the M/V "MOTTLER", says he will be
operating as UT1FG/MM on AO-7, AO-27, AO-51, HO-68, SO-50, SO-67,
amd VO-52 from the wet squares in the ocean on his next voyage
around South America from Brasil/Paranagua to Argentina/San-Lorenzo,
through the Strait of Magellan, Chile/San-Antonio/Punta Potache, and
the Panama Cannal.

+ Martin, KC9JGE, has made a YouTube video of one of his contacts with
Astronaut Doug Wheelock KF5BOC on the International Space Station.
You can watch the video via the SouthGate ARC site at:
http://tinyurl.com/25qtdrt

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-332.08
ARISS Status - 22 November 2010

AMSAT News Service Bulletin 332.08
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010

To All RADIO AMATEURS
BID: $ANS-332.08

1. Euro Space Center Contact Successful

Twenty-four students from the International School Zurich North, Switzerland, attending the Euro Space Center in Transinne, Belgium, spoke with ISS astronaut Doug Wheelock, KF5BOC via an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 16. Telebridge station VK5ZAI in Australia handled the radio link. Wheelock fielded 15 questions about life in space during the session. The contact was an activity incorporated into the Euro Space Center Space Camp which hosts students from all over Europe and abroad.

2. Grand Junction Students Speak with ISS Astronaut

On Friday, November 19, students attending Holy Family Catholic School in Grand Junction, Colorado participated in an Amateur Radio on the International Space Station (ARISS) contact with on-orbit astronaut Doug Wheelock, KF5BOC. The school involved the entire student body of 400 students in this project. Several of the older students earned their amateur radio licenses prior to the contact and younger students participated in essay contests and art activities devoted to the contact with the ISS.

3. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, November 16. Topics discussed included updates on ARISSat-1 and the Columbus module radio equipment. Minutes have been posted. See: https://www.rac.ca/ariss/arisstel2010-11-16.htm

4. ARISSat-1 Approved for Shipping

ARISSat-1 has been approved by Energia for shipment to Russia. The satellite is currently scheduled to arrive in Russia the first week of December. After the battery and the Kursk University experiment are installed, the satellite will be tested for flight and a final safety review will be scheduled.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

# 107. University Satellites Missions and Cubesat Conference Sponsorships

Newsgroup: rec.radio.amateur.space
Date: 2010-11-29 16:44:19 UTC
From: ARRL Members Only Web site <memberlist@www.arrl.org>
Message-ID: <20101129153805.B2EE2263E8@bmail.arrl.org>
Source record: 410
Cross-posted to: rec.radio.amateur.space,rec.radio.info

Joe Murray, KØVTY was kind enough to pass this along to me. Here it is
just in case there are any students in the Section who might be
interested.

---
>Date: Thu, 25 Nov 2010 10:59:12 +0100
>Subject: [amsat-bb] 1st IAA Conference on University Satellites
Missions
and Cubesat Conference Sponsorships and Accommodation

Dear all,

we are pleased to announce that ESA has kindly offered ten scholarships
for students who will present a paper at the 1st IAA Conference on
University Satellites Missions and Cubesat Conference next January. You
can find the information at the following link:

ESA scholarships
<http://www.gaussteam.com/index.php?option=com_content&view=article&id=111&Itemid=214>

Furthermore, we have reached an agreement with two hotels for the
accommodation of the participants. You can find all the information at
the following link:

Accommodation
<http://www.gaussteam.com/index.php?option=com_content&view=article&id=109&Itemid=211>

We hope that this will encourage students in participating to the
Conference.

Best regard

-- Gruppo di Astrodinamica Università degli Studi Sapienza
Via Salaria, 851
00138 Roma
website: www.gaussteam.com
tel. 0039 06 88346436
_____
Sent via AMSAT-BB@amsat.org. Opinions expressed are those of the
author. Not an AMSAT-NA member? Join now to support the amateur
satellite program! Subscription settings:
http://amsat.org/mailman/listinfo/amsat-bb

---
ARRL Nebraska Section
Section Manager: Arthur I Zygielbaum, K0AIZ

k0aiz@arrl.org
---

## 108. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2010-12-01 07:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1291186801@panix.com>
Source record: 411
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

## 109. WSR-334 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-12-01 17:39:49 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002901cb917e$b42b6240$1c8226c0$@net>
Source record: 412
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-334.S1
WSR 334 Part 1 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S1
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-334.S2
WSR 334 Part 2 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S2
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac-2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====

TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====

ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====

UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-334.S3
WSR 334 Part 3 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S3
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278

Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT

Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703

Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-334.S4
WSR 334 Part 4 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S4
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 110. meteor scatter

Newsgroup: rec.radio.amateur.space
Date: 2010-12-05 14:38:03 UTC
From: Sean Con <universeexplorer@cwahi.net>
Message-ID: <MPG.2765c231c71791c3989680@nntp.aioe.org>
Source record: 413

Dear Meteor Scatterers..

My name is Sean . I found this newsgroup from www.VHFDX.de.

I am very interested in meteors scatter. However not primarily DXing. I am primarily interested in meteor scatter because that can be used for studying the meteor themselves, and the ionization they create.

There is another project from my friend called Constellation [www.aerospaceresearch.net/constellation]. He also expresses great interest in meteor scatter.

We would like to detect the scattered signals and triangulate for calculating the meteor trajectory. We would also like to study the ionization strength and possibly the meteor composition.

We would like to offer you a calaboration and start your own project about meteor-scattering on the Constellation platform. If you are intersted or want to learn more about us, just feel free to ask us at constellationathome@gmail.com.

regrads

Sean

## 111. Why are you waiting here online Russian Wives

Newsgroup: rec.radio.amateur.space
Date: 2010-12-06 06:38:50 UTC
From: Kimberly Lilla <kimberlylilla@gmail.com>
Message-ID: <f567e24e-cce7-494e-8fc6-6db0c44846f6@z26g2000prf.googlegroups.com>
Source record: 414

Think about your marriage and get trusted women
http://brad-zone.com/6zku

## 112. ANS-339 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-12-06 22:08:58 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <005b01cb9592$28c62830$7a527890$@net>
Source record: 415
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-339

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat Status
* UO-11 Report
* STRAIGHT KEY NIGHT ON OSCAR 2011
* Satellite Shorts
* ARISS Status - 29 November 2010

SB SAT @ AMSAT $ANS-339.01
ARISSat Status

AMSAT News Service Bulletin 339.01
>From AMSAT HQ SILVER SPRING, MD.
December 3rd, 2010
To All RADIO AMATEURS
BID: $ANS-339.01

ARISSat and the backup unit are in Germany, they are schedulted for delivery to Moscow on Saturday. We will know Tuesday if there were any problems getting them through customs. Lou McFadin, W5DID and Mark Steiner, K3MS will be heading to Moscow on the 10th of December to assist with integration and testing of the Kursk experiment and battery.

The schedule still has ARISSat going to the ISS via a Progress vehicle in late January 2011 and release from the ISS in late February 2011.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.02
UO-11 Report

AMSAT News Service Bulletin 332.02
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-332.02

This report covers the period from 29 October to 30 November 2010.
During this time the satellite has been heard from 30 October to
09 November and 19 to 29 November . At the time of writing it is
is expected to switch-on 10 December.

Excellent signals have been reported from stations located around
the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals
are weaker at those times. This indicates that there is still some
capacityremaining in the battery.

The on-board clock is now very stable. It gained eight seconds
during November. This is comparable with its accuracy when the
satellite was fully operational, when it gained approximately one
minute per year. However,there is still an accumulated loss of 309
days, which has occurred during eclipses of the last few years.

Operation during eclipses and stability of the on-board clock suggest
that some part of the system may have recently failed 'open circuit'
thus reducing the overall power drain of the system, and allowing more
power to be available during eclipses. When analogue telemetry was
last transmitted, an unexplained current drain was observed. This
fault may have cleared.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Reception reports have been received from Gene WA4UKX, Horatio CX8AF,
David G8OQW and Michael M0MPM/PA3BHE . Many thanks for those and to
everyone who posted reports on the satellite status website.

At the present time, while OSCAR-11 is operating in a predictable way,
I no longer need direct reports by e-mail. However, could you continue
to enter reports on the general satellite status website. This is a
very convenient and easy to use facility, which shows the current status
of all the amateur satellites, and is of use to everyone. Reports around
the expected times of switch-on and switch-off are of special interest.
The URL is http://oscar.dcarr.org/index.php

OSCAR-11 transmits on 145.826 MHz., set receiver to NBFM. The satellite
has a characteristic sound, rather like raspy slow morse code, sending
"di di dah dah dah dah dah dah dah" sent over a period of five seconds.
If you are receiving a very weak signal, switch the receiver to CW or SSB.
You should hear several sidebands around the carrier frequency and should
be able to hear the characteristic 'morse code like' sound on at least one

sideband.

Please note that you need a clean noise-free signal to decode the signals, and your receiver must be set to NBFM mode, for a decoder to work.

If you need to know what OSCAR-11 sounds like, there is an audio clip on my website http://www.g3cwv.co.uk/ which may be useful for identification and as a test signal for decoding.

The current status of the satellite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. The real time clock is showing a large accumulated error, but is now incrementing accurately to within a few seconds per month. The day of the month has a bit stuck at 'one' so the day of the month may show an error of +40 days for some dates. The time display has switched into 12 hour mode. Unfortunately, there is no AM/PM indicator, since the time display format was designed for 24 hour mode.

The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed.

The watchdog timer operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations have shown this to be 20.7 days, ie. 10.35 days ON followed by 10.35 days OFF.

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The last telemetry received from the satellite is available for download. The website contains an archive of news & telemetry data which is updated from time to time. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is http://www.g3cwv.co.uk .

73 Clive G3CWV

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-339.03
Straight Key Night on OSCAR 2011

AMSAT News Service Bulletin 339.03
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-339.03

You are cordially invited to participate in Straight Key Night on OSCAR 2011, conducted by AMSAT for radio amateurs throughout the

world.

This year's event is dedicated to the memory of Dick Peacock, W2GFF, who died in 2010 aged 91. Dick was an active satellite operator in the 1970s and 1980s, mostly on CW and usually with a straight key. He was also active on 50 MHz and the HF bands, and could always be counted on for a kind word and a friendly QSO.

There are no rules, no scoring and no logs required. Just operate CW on any OSCAR satellite, using a straight hand key, from 0000 UTC to 2400 UTC on 1 January 2011, working as many SKN stations as you can.

In keeping with the friendly nature of this event, each participant is asked to nominate one of the operators worked for "Best Fist." It is not necessary that your nominee have the best fist of anyone you heard, just of those you worked. Please send your nomination to W2RS via email at w2rs@amsat.org. Those nominated will be recognized in an ANS bulletin to be published in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-339.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 339.04
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-339.04
Satellite Shorts From All Over

+ Look for Drew, KO4MA operating on the satellites from the area around NASA Stennis and Slidell, Louisiana. This is a work trip so operating time will be limited to free time in the evenings. Drew said he favors transponder satellite operating over FM so look for him on SSB 20 KHz or more above the center of the pass-band. He will return QSL 100% with SASE. He will be enroute to Stennis from Tampa on December 6.

+ The Zooniverse started the Zooniverse Advent Calendar, similar to the one-a-day-chocolate-treat calendars we all love, but this calendar includes a surprise each day such as special images, downloads and even a couple of very big pieces of space news: http://www.zooniverse.org/advent

The Boston Globe's Big Picture has their third annual Advent Calendar of Hubble Pictures: http://tinyurl.com/232ssyj

If you'd like to send an e-card specifically to the astronauts on board the International Space Station, NASA has a website just for you: http://www.nasa.gov/externalflash/postcard/

You can send Chandra X-Ray Observatory E-Cards with a holiday
theme from: http://tinyurl.com/27lf8s2

The Space Science Institute invites you to investigate their
selection of e-cards at:
http://www.spaceweathercenter.org/ecard/01/gallery.php

If you love Hubble, and want to send space-themed holiday cards
the folks from the Hubble Space Telescope have a great collection
of beautiful cards you can download, and send. The cards are des-
igned to be printed out at photo stores or online photo labs,
though you can also use a home printer. See:
http://hubblesite.org/gallery/holiday/

+ The next Hudson Valley Satcom Net is Thursday December 9 at 8PM EST
(UTC - 5) on the 146.970 MHz Mt. Beacon ARC Repeater. The Echolink
node N2EYH-L will also be carrying the net. More information is
on-line at: http://www.hvsatcom.org or E-Mail wa2aqh@amsat.org

The date for next year's Mt. Beacon ARC "Beaconfeste" is Sunday
April 10, 2011 at Tymor Park in Central Dutchess County, NY.
More information is available on-line at:
http://www.wr2abb.org/home/ (Stu, WA2BSS)

+ NASA Television will provide live coverage of the prelaunch news
conference for the COTS 1 Falcon 9 launch Monday, Decemeber 6,
at 1:30 p.m. The first SpaceX Falcon 9 demonstration launch for
NASA's Commercial Orbital Transportation Services program is
targeted for liftoff on Tuesday, Dec. 7. Liftoff will occur from
Launch Complex 40 at Cape Canaveral Air Force Station in Florida.
The launch window extends from 9:03 a.m. to 12:22 p.m. EST. If
necessary, launch opportunities also are available on Dec. 8 and
Dec. 9 with the same window. (SpaceDaily.com)

+ Hans van de Groenendaal, ZS6AKV reminds users that the SO67 sched-
ule is posted at http://www.amsatsa.org.za . It changes weekly with
the Americas the first week of the month, Europe the second week,
Middle East/India the third week and Australia and Japan fourth week.
Special requests with time in UTC should be sent to:
saamsat@intekom.co.za

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-339.05
ARISS Status - 29 November 2010

AMSAT News Service Bulletin 339.05
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-339.05

1. Italian Students Question Astronaut via ARISS

On Wednesday, November 24, on-orbit astronaut Doug Wheelock, KF5BOC participated in an Amateur Radio on the International Space Station (ARISS) contact with students attending the Istituto Leopardi - Liceo classico e scientifico in Lecco, Lecco, Italy. The activity was the high point of the school's curriculum which included astronautics, astronomy, radio and English. Approximately 200 students, teachers and guests were present for the event and listened as Wheelock answered 13 questions posed by the youth. Video streamed on the Web received over 100 connections. ESA covered the contact in an article posted to its Web site.
See: http://www.esa.int/esaCP/SEMSPVFMTGG_Italy_0.html

2. Video of Wheelock Working Ground Stations

Doug Wheelock had a video made while on-orbit in which he gives a tour of the ISS as well as of the amateur radio station. He demonstrates what it is like for an astronaut to handle general contacts with multiple ground stations calling at the same time. AMSAT included this news in its November 28 ANS report:
http://amsat.org/pipermail/ans/2010/000464.html

The video has been posted to YouTube.
See: http://www.youtube.com/watch?v=h73EYcyszf8

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

## 113. Radio Meteor Obs. Bull. November 2010 Leonids November Orionids

Newsgroup: rec.radio.amateur.space
Date: 2010-12-08 22:06:47 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <h500g69qoqkqgpuni0i2ov8dsld66kjugj@4ax.com>
Source record: 416
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 208 of November 2010 (100 K) is available now as

http://www.rmob.org/rmobtext/rmob1011.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

# 114. ANS-346 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-12-12 01:21:02 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000801cb999a$d77fc780$867f5680$@net>
Source record: 417
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-346

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISS Celebrates 10th Anniversary of Student Conversations with ISS Astronauts
* SpaceX Falcon 9 Mission Successful - Deploys Cubesats
* December AO-51 Schedule Features VHF BBS Test, SKN, Dual SU Downlink
* AMSAT-UK FUNcube Documents On-Line
* Remembering Lost UNITEC-1 - Japan's Akatsuki Problem at Venus Encounter
* Writing Opportunities for Amateur Radio in Space
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-346.01
ARISS Celebrates 10th Anniversary of Student Conversations with ISS Astronauts

AMSAT News Service Bulletin 346.01
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.01

On 21 December 2000, astronaut William Shepherd turned from his usual activities aboard the newly occupied International Space Station (ISS). Floating over to a "ham" radio attached to a station bulkhead, he called the Burbank School in Burbank, Illinois and was soon talking with 14 enthusiastic students from grades 1-8. This month, amateur radio operators world-wide celebrate the tenth anniversary of this first school contact from ISS.

Since that first contact, Amateur Radio on the International Space Station (ARISS) volunteers have conducted 565 successful contacts in 40 countries, allowing thousands of students to share the excitement of those first 14. Moreover, tens of thousands of students, faculty, and parents have participated by planning and attending these events.

ARISS contacts have prompted countless students to seriously consider pursuing science, technology, engineering, and math (STEM) careers, including becoming an astronaut. Educational programs and amateur radio clubs established at participating schools continue to inspire students long after the contact has ended.

The use of amateur radio in space began in 1983 aboard the Space Shuttle Columbia. The Shuttle Amateur Radio Experiment (SAREX) flew on 28 shuttle missions, proving the educational and crew morale benefits of ham radio. Ham radio also proved popular with the cosmonauts aboard space station Mir. The value of amateur radio in space was so apparent to NASA and the Russian Space Agency that the ARISS radio became the first experiment to be activated on ISS.

ARISS is a volunteer program that inspires students the world over to pursue STEM careers by providing amateur radio communications opportunities with the International Space Station (ISS) on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families, and local residents) to become more aware of the substantial benefits of human spaceflight and the exploration and discovery that occur on spaceflight journeys while learning about technology and amateur radio.

ARISS is an international working group comprising delegations from 9 countries, including several countries in Europe as well as Japan, Russia, Canada, and the USA. The organization is run by volunteers from national amateur radio organizations and international AMSAT (Radio Amateur Satellite Corporation) organizations in each member country. ARISS team members in each country work with their respective space agencies (ESA, NASA, JAXA, CSA, and the Russian Space Agency). In the USA, ARISS works with the NASA Teaching From Space program.

[ANS thanks ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-346.02
SpaceX Falcon 9 Mission Successful - Deploys Cubesats

AMSAT News Service Bulletin 346.02
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.02

SpaceX launched the Dragon spacecraft from Florida on a two-orbit test flight Wednesday, December 8 and the company brought the automated capsule back to Earth less than three-and-a-half hours later.

A video of the Falcon 9 liftoff can be viewed at:
http://www.youtube.com/watch?v=Xi9ljTW3GEQ

Liftoff photos from pad cameras can be viewed at:
http://spaceflightnow.com/falcon9/002/remotes/

SpaceFlightNow.com's Photo Gallery of the launch can be viwed at:
http://spaceflightnow.com/falcon9/002/press/

Photos of the Dragon parachute landing in the Pacific can be
viewed at: http://spaceflightnow.com/falcon9/002/splashdown/

During the flight four cubesats were deployed from the "trunk"
section of the Dragon spacecraft. At press time the function of
two of the cubesats have been identified.

The University of Southern California's (USC) CAERUS cubesat was
deployed SpaceX Falcon 9 rocket. CAERUS is part of the "MAYFLOWER"
Next Generation Technology CubeSat that is a joint effort with
Northrop Grumman NOVAWORKS group. CAERUS is licensed by the FCC
in the Experimental Service. It also has an amateur callsign and
a downlink in the 70cm band:

Call Sign: KJ6FIX
Downlink Frequency: 437.600 MHz (not coordinated by IARU)
Beacon Output Power: 900mW
Modulation Type: AFSK, 1200 baud
TLE: Updated on website, right after launch.

The CAERUS website is at: http://tinyurl.com/37w8map. The beacon
data can also be translated with the jar applet provided on this
website.

The second cubesat identifed aboard the Falcon X launch was the
US Army SMDC-ONE nanosatellite mission which is a store and for-
ward satellite. The primary objective of the first flight wass to
receive data from a ground transmitter and relay that data to a
ground station. The technology is planned to be expanded to build
a number of identical satellites and deploy them together into Low
Earth Orbit to simulate enhanced tactical communications capability.

[ANS thanks Omair A. Rahman at the University of Southern California,
SpaceDaily.com, and SpaceFlightNow.com for the above information]

/EX

SB SAT @ AMSAT $ANS-346.03
December AO-51 Schedule Features VHF BBS Test, SKN, Dual SU Downlink

AMSAT News Service Bulletin 346.03
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.03

AMSAT-NA VP Operations Drew KO4MA says the December 2010 AO-51 schedule
has been released. Some of the dates of mode changes may move a day or
so according to command station availability.

Note the 2m up BBS test beginning December 12. Beginning on December 17
a dual downlink of UHF and S-band will be available. AO-51 will feature
its CW up, FM down mode for Straight Key Night.

At the end of December we go back into eclipses for a LONG time, so the
overall power budget will shrink, and the command team will reinstate
the new PL mode, and the satellite will likely be off in eclipse.

December 12 (late UTC)
----------
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, V/U
Uplink: 145.860 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

December 17 (late UTC)
----------
FM Repeater, V/SU
Uplink: 145.880 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM *and* 435.300 MHz FM (at low power!)

December 22 (late UTC)
----------
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

December 30 (late UTC)
----------
CW/FM Repeater, V/U For Straight Key Night
Uplink: 145.880 MHz CW
Downlink: 435.300 MHz CW over FM

9k6 Baud Telemetry
Downlink: 435.150 MHz FM at 9600 baud

As always, keep up with the latest AO-51 Control Team news at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-346.04
AMSAT-UK FUNcube Documents On-Line

AMSAT News Service Bulletin 346.04
>From AMSAT HQ SILVER SPRING, MD.

December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.04

AMSAT-UK says they intend to publish as many of the working documents as possible for their FUNcube satellite and the first two documents are now available. The Mission Requirements Specification and the PA Board Specification can be downloaded from:
http://funcube.org.uk/working-documents/

Pictures and videos from the recent FUNcube developers meeting at Martlesham are at:
http://funcube.org.uk/working-meetings/cubesat-mtg-1314-nov-2010/

The UK Space Agency is proposing to use the AMSAT-UK FUNcube boards as part of its innovative new CubeSat UKube-1 slated for launch in December 2011.

The United Kingdom Space Agency website now includes some more details of the UKube-1, a 3U CubeSat (10 * 10 * 30cm) project. See:
http://www.ukspaceagency.bis.gov.uk/20084.aspx

The baseline design for this satellite includes a set of FUNcube boards to provide the educational outreach for the project. AMSAT-UK are presently discussing the precise details of this arrangement with the UKube-1 project team. This development will enable a much higher level service to be provided for Science, Technology, Engineering and Mathematics (STEM) outreach to schools than would be possible with just a single spacecraft.

An information pack is provided by the UK Space Agency is at
http://www.ukspaceagency.bis.gov.uk/assets/ZIP/CubesatAOpayload.zip

BBC report on UKube: http://tinyurl.com/2w3rgyc (bbc.co.uk site)

FUNcube website
http://www.FUNcube.org.uk/

[ANS thanks Trevor, M5AKA, AMSAT-UK, and the SouthGate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-346.05
Remembering Lost UNITEC-1 - Japan's Akatsuki Problem at Venus Encounter

AMSAT News Service Bulletin 346.05
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.05

UniverseToday reported that Japan's first Venus space probe has arrived at the planet but encountered problems while attempting orbit insertion

and went into safe mode. It took longer than expected (an hour and a half) to regain communications after a known 22 minute blackout with the Akatsuki spacecraft, and apparently controllers are still trying to ascertain the spacecraft's orbit. They have regained some radio communications. Telemetry analysis confirmed the spacecraft was in safe mode.

The planned orbit for Akatsuki ranged between 300 and 80,000 kilometers (186 to 49,600 miles), looking for signs of lightning and active volcanoes.

Once communications were restored JAXA was able to determine that the probe's High Gain Antenna is working and telemetry from the spacecraft is back to normal function as is full control and stabilization. AKATSUKI is in a Sun circular orbit after not reaching Venus orbit.

Read the UniverseToday story at: http://tinyurl.com/2cfgw5p
and at: http://tinyurl.com/2vvl8yd (SpaceCoalition.com)

The May 21, 2010 Akatsuki launch also carried the UNITEC-1 amateur radio satellite with the callsign of JQ1ZUN. Its 5840.000 MHz, 4.8W beacon was initially copied from low earth orbit but the signal was lost days later. UNITEC-1 would have become the world's first university satellite which went beyond Lunar orbit.

[ANS thanks UniverseToday for the above information]

/EX

SB SAT @ AMSAT $ANS-346.06
Writing Opportunities for Amateur Radio in Space

AMSAT News Service Bulletin 346.06
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.06

IAA Conference on University Satellites Missions and Cubesats
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The December 18 deadline for abstract submissions for the 1st IAA Conference on University Satellites Missions and Cubesat Conference is rapidly approaching. This conference will be held in Rome on January 24-29, 2011. Early registration closes on January, 10th. Those who register before this date will have a discount rate. Full information is posted at: http://www.gaussteam.com under the "Events" tab.

Call for papers for 2011 SA AMSAT Space Symposium
---
The 2011 SA AMSAT Space Symposium will be held in Gauteng on Saturday 26 March 2011 at Vodaworld in Midrand. This is the first call for papers. Authors are invited to submit a synopsis in a MSWord document not exceeding 300 words. The synopsis should be mailed to:

saamsat@intekom.co.za (with Space Symposium 2011 in the subject line). The theme of the conference is Innovation in Space Communication. Closing date for paper proposals and a synopsis is 20 January 2011. For more details visit: http://www.amsatsa.org.za.

Call for Papers: 15th Annual SEVHF Society Conference
---
The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 15th annual Southeastern VHF Society Conference to be held in Huntsville, Alabama on April 29th and 30th, 2011. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio.

Contact Steve Kostro, (e-mail: SVHFS2011 AT downeastmicrowave DOT com) by January 8th, 2011 if you wish to make a presentation or submit your paper. Deadline for the submission of papers is March 11, 2011. For further information and updates about the conference please go to: http://www.svhfs.org

Call for Papers: 45th Central States VHF Society Conference
---
The Central States VHF Society is hosting their 45th Conference July 29-30, 2011 in Irving Texas. They are currently looking for papers relating to amateur radio above 50 MHz. Anticipated topics include: Design and build of VHF thru microwave equipment, VHF DXPeditions, Antenna Design, Weak Signal Reception Techniques. Deadline for papers is May 1, 2011. Papers should be sent to: Kent Britain <wa5vjb@flash.net>

[ANS thanks the IAA, SA AMSAT, and Robin Midgett K4IDC 2011 Conference Program Co-Chair, SVHFS; Chuck Clark, AF8Z for the above information]

/EX

SB SAT @ AMSAT $ANS-346.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 346.07
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.07

+ For those who collect archived publications here is a link to a recently posted digitized copy of the 1985 1296/2304 MHz Conference which has evolved into the Microwave Update MUD Conference. Thanks to the work of Brian, WA1ZMS, these proceedings have been digitized and can be downloaded in 7 sections from http://www.wa5vjb.com in the Reference Section.

+ The AMSAT India newsletter is back after a long break and will be published every month. A softcopy of the newsletter can be found at:

http://amsatindia.org/Newsletter/AMSATINDIA-News-Dec2010.pdf
Archives are at http://amsatindia.org/Newsletter/
(via Nitin, VU3TYG, Secretary, AMSAT India)

+ AMSAT-ZL's Fred Kennedy, ZL1BYP says the KiwiSAT team is in need of a small quantity supply source of space quality thermally conductive epoxy for KiwiSAT. They will need probably less than 10 grams total over the last few months of KiwiSAT construction. Minimum order quantities have been quoted as 100 tubes and this amount is not needed nor can be afforded. Contact Fred at: fredk@kcbbs.gen.nz if you can help.

+ Henk, PA3GUO has posted a YouTube video (HD) that features the O/OREOS satellite from launch to telemetry reception and decode, including DK3WN's Softwar and Mission control upload:
http://www.youtube.com/watch?v=Qh6lH5vqw-Y

Henk also has a video of the 'bare' telemetry stream at:
http://www.youtube.com/watch?v=M4Ka-RVpEHU

O/OREOS audio recording: http://www.pa3guo.com/OOREOS_PA3GUO.mp3
FASTRAC/FAST1 audio recording: http://www.pa3guo.com/FAST1_PA3GUO.mp3
(Henk says you can use MixW with your MP3 your player to decode the telemetry.)

+ Roland PY4ZBZ reports that Yuri UT1FG/MM, has been active at sea from the vessel M/V "MOTTLER", on SO-50, FO-29 and HO68, in the squares: GG85, GG54, GE06, FD37, FD29, FE82, FE81, FE20 and FE21, from Rio de Janeiro to Chili via the Strait of Magellan.

+ UniverseToday.com declares, "What a view!" A photograph taken by one of the astronauts on the International Space Station shows several snow-covered volcanoes on Russia's Kamchatka Peninsula.
See: http://tinyurl.com/24ccnz4

+ The Nanosail-D nanosatellite may have failed to eject from FASTSAT. NASA had planned to eject Nanosail-D from its cannister on December 6. Initial telemetry indicated that ejection was successful. It also now appears that the solar sail may not have unfurled. NASA continues to investigate. The NanoSail-D amateur radio beacon will transmit a one-half second data signal every 5 seconds on 437.270 MHz if it becomes active. The satellite will operate primarily on battery power because of the short duration of the mission.

+ The next crew arriving at the International Space Station on December 17 includes two radio amateurs: US astronaut Catherine Coleman, KC5ZTH, and the European Space Agency's Paolo Nespoli, IZ0JPA.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind that upon receiving his invitation to his radio club's Christmas Party the ham decided it was time to get spruced up.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

## 115. WSR-342 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-12-12 16:05:33 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cb9a16$65e0a410$31a1ec30$@net>
Source record: 418
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-342.S1
WSR 342 Part 1 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S1
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-342.S2
WSR 342 Part 2 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S2
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac-2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====

TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====

ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====

UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-342.S3
WSR 342 Part 3 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S3
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278

Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT

Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703

Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-342.S4
WSR 342 Part 4 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S4
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

## 116. WSR-351 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2010-12-17 19:35:40 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001501cb9e21$83b92750$8b2b75f0$@net>
Source record: 419
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-351.S1
WSR 351 Part 1 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S1
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater: V/su
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
Downlink: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12172010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-351.S2
WSR 351 Part 2 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S2
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac-2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====

TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====

ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater: V/su
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
Downlink: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12172010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[121702010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-351.S3
WSR 351 Part 3 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S3
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278

Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT

Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703

Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-351.S4
WSR 351 Part 4 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S4
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

# 117. ANS-353 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-12-20 15:00:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000d01cba056$b1cc50e0$1564f2a0$@net>
Source record: 420
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-353

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Straight Key Night
* This month's satellite awards
* XW-1 1 year anniversary
* AMSAT-UK FUNcube Needs Help
* ARISS Status December 13, 2010
* Satellite Shorts
* Thanks for your support

SB SAT @ AMSAT $ANS-353.01
Straight Key Night

AMSAT News Service Bulletin 353.01
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.01

You are cordially invited to participate in Straight Key Night on OSCAR 2011, conducted by AMSAT for radio amateurs throughout the world.

This year's event is dedicated to the memory of Dick Peacock, W2GFF, who died in 2010 aged 91. Dick was an active satellite operator in the 1970s and 1980s, mostly on CW and usually with a straight key. He was also active on 50 MHz and the HF bands, and could always be counted on for a kind word and a friendly QSO.

There are no rules, no scoring and no logs required. Just operate CW on any OSCAR satellite, using a straight hand key, from 0000 UTC to 2400 UTC on 1 January 2011, working as many SKN stations as you can.

In keeping with the friendly nature of this event, each participant is asked to nominate one of the operators worked for "Best Fist." It is not necessary that your nominee have the best fist of anyone you heard, just of those you worked. Please send your nomination to W2RS via email at w2rs@amsat.org.

Those nominated will be recognized in an ANS bulletin to be published in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

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SB SAT @ AMSAT $ANS-353.02
This month's satellite awards

AMSAT News Service Bulletin 353.02
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.02

Here are the awards that I have processed over the last month. This will be the last posting for 2010.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

Alan Murray, Jr., N1ZWL
Richard Lewis, KG6ZVC

The following have earned the AMSAT Communications Achievement Award.

Boris Lanca, 9A2GA #525
Paul Gagnon, N6MA #526
Rick Tejera, K7TEJ #527
Jim Bennett, KE4KOL #528
Tom Deeble, KA6SIP #529
Glenn Barr, WB0KFC #530

The following have earned the AMSAT Sexagesimal Award

Paul Gagnon, N6MA #158

The following have earned the South Africa Satellite Communications Achievement award

Nick Kucij, KB1RVT #US157
Boris Lanca, 9A2GA #US158
Rick Tejera, K7TEJ #US159
Jim Bennett, KE4KOL #US160
Tom Deeble, KA6SIP #US161
Glenn Barr, WB0KFC #US162

To see all the awards visit http://www.amsat.org

Bruce Paige, KK5DO

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-353.03
XW-1 1 year anniversary

AMSAT News Service Bulletin 353.03
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.03

HOPE-OSCAR 68 HO-68 Commemorates First Anniversary

This week AMSAT China noted the first anniversary of XW-1, also known as Hope-Oscar 68 HO-68 with an announcement from Michael Chen, BD5RV/4 at AMSAT-China.

AMSAT President Barry Baines, WD4ASW remarked that HO-68 was a significant milestone for both amateur radio and AMSAT-China. Barry wrote, "We are very excited to see that HO-68 continues to operate in good health and that a new member of the AMSAT International family has established itself. Again, congratulations on a placing HO-68 in service and best wishes for the New Year."

>From India, Secretary of the Upagrah Amateur Radio Club at the ISRO Satellite Centre, Mani, VU2WMY wrote, "Wishing XW 1 HO-68 'A Happy Birthday'. Our good wishes and greetings to HO-68 for a very long and healthy life to serve the Ham community World wide."

Rick, K7TEJ said, "Many thanks thanks to you and Allan and the rest of your team for your efforts to make this great bird available to us. May HO-68 have a long life!"

>From Alaska, Dale KL7XJ commented, "A very Happy Birthday to XW1, HO-68. A very good satellite to work!"

Roland, PY4ZBZ reported good signals from HO-68 as he worked PY1AT, PY5LF and UT1FG/MM on his sea voyage in grid FF36.

The latest HO-68 information and operating schedule can be found on-line at: http://www.camsat.cn/

[ANS thanks BD5RV/4, WD4ASW, VU2WMY, K7TEJ, KL7XJ, and PY4ZBZ for the above information]

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SB SAT @ AMSAT $ANS-353.04
AMSAT-UK FUNcube Needs Help

AMSAT News Service Bulletin 353.04
>From AMSAT HQ SILVER SPRING, MD.

December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.04

AMSAT-UK is looking for people in the educational field to help develop the educational outreach part of the FUNcube satellite project.

AMSAT-UK's FUNcube is an educational satellite project with the goal of enthusing and educating young people about radio, space, physics and electronics. Additionally it features a 435 to 145 MHz Linear Transponder for SSB/CW operation for use outside school hours.

It will support the many existing educational Science, Technology, Engineering and Maths (STEM) initiatives including GB4FUN.

The target audience consists of school pupils and young people generally, FUNcube will feature a 145 MHz telemetry beacon that will provide a strong signal for the pupils to receive.

A simple FUNcube dongle SDR receiver has also been developed. This will connect to the USB port of a laptop to display telemetry and messages in an interesting way.

The project commenced in October 2009 and it is anticipated that the satellite will be launched before the end of 2011. More information can be found at http://www.funcube.org.uk/

As the technical work on the satellite itself is now well underway, AMSAT-UK is now looking to develop the educational outreach part of the project. This will include the design and contents of the "ground station" laptop display, the best method of providing the information so that it relates to current curricula, and all the supporting information that will be needed by the teachers. As they have little current educational experience Amsat-UK need additional professional advice as to how to carry it forward.

The FUNcube website now has details of the planned educational aspects of the project. See http://www.funcube.org.uk (see the "education outreach" link).

If you are in the educational field and have experience in curriculum matters then please consider helping AMSAT-UK with this.

In the first instance please contact Richard G3RWL for further information via e-mail: g3rwl at amsat.org

The latest FUNcube information can be found on-line at these pages:

FUNcube website
http://www.FUNcube.org.uk/

FUNcube SDR Dongle
http://www.FUNcubeDongle.com/

FUNcube Yahoo Group
http://groups.yahoo.com/group/FUNcube/

[ANS thanks AMSAT-UK for the above information]

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SB SAT @ AMSAT $ANS-353.05
ARISS Status December 13, 2010

AMSAT News Service Bulletin 353.05
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.05

1. AMSAT Covers ARISS Anniversary

The AMSAT (Radio Amateur Satellite Corporation) News Service bulletin
(ANS-346) included an article on the tenth anniversary of ARISS.
See: http://amsat.org/pipermail/ans/2010/000468.html

2. Amateur Radio Newsline Reports on ARISS

On December 10, the Amateur Radio Newsline Report 1739 ran two ARISS
news items under its heading Ham Radio in Space. Covering ten years
of contacts is the story, "ARISS Celebrates its 10th Anniversary."
"ARISSat One Enroute to Moscow" talks about the satellite on its
way to Russia for testing and launch.
See: ftp://ftp.arnewsline.org/quincy/News/news.txt

3. Astronaut Training Status

Astronaut Tom Marshburn, KE5HOC is scheduled for an ARISS introduction
class on December 13. Marshburn is slated to fly with
Expedition 34 in November 2012.

[ANS thanks Carol,KB3LKI, for the above information]

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SB SAT @ AMSAT $ANS-353.06
Satellite Shorts

AMSAT News Service Bulletin 353.06
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.06

+ AMSAT's Keeper of the Keps, Ray Hoad WA5QGD advised that recent
Cubesats launched from Kodiak have been added to the AMSAT KEP
distribution:
RAX - Cat # 37223
OOREOS - Cat # 37224
FASTSAT - Cat # 37225

FAST1 and FAST2 - Cat # 37227 (FAST1 and FAST2 have the same KEPs)

For some reason, yet unknown, Spacetrack is not publishing the KEPs
for the above satellites. Special thanks to Drew Glasbrenner (KO4MA)
for helping find the location of the KEPs for the above satellites.

+ Boris, UA0QJ (Asiatic Russia) in grid PP42TA has been reported to be
active on AO7 mode B. He has been operating CW so far.

+ Listen for Duane, K5VGU operating portable on the satellites from
Kentucky grid EM67 mostly and possibly the Kentucky piece of EM68.
Duane will be in the area December 22 through December 29.

+ Listen for Daniel, VO1DZX operating portable VO2 from Labrador (FO62)
until December 31. Daniel reports that bad operating conditions and
lack of transportation will probably keep him from working any addi-
tional grids. The best time to find him will be on the late afternoon/
early evening AO51 passes as long as he can get on. Weekends will be
a good time to catch him as well.

+ Congratulations to AMSAT's Samudra N3RDX on his selection to present
a technical paper at the AIAA Aerospace Sciences Meeting in January
2011 in Orlando, Florida. His paper is: "A Broadband Multi-hop Network
for Earth-Mars Communication using Multi-purpose Interplanetary Relay
Satellites and Linear-Circular Commutating Chain Topology".

+ The next Hudson Valley Satcom Net will be on Thursday, December 23 at
8:00PM EST (UTC - 5). The net meets on the Mt. Beacon 146.970 MHZ re-
peater and also on Echolink N2EYH-L node. More information is on-line
at http://www.hvsatcom.org.

+ The December 10 edition of the UK Metro newspaper carried an article
titled 'Celebrating great British science' which featured the AMSAT-UK
FUNcube satellite. Read the article on page 25 of the Online edition
of the Metro newspaper at http://e-edition.metro.co.uk/2010/12/10/?p=25

+ Video of the spectacular night launch of the Soyuz TMA-20 spacecraft
with Expedition 26 crew members NASA astronaut Cady Coleman, Russian
cosmonaut Dmitry Kondratyev, and European Space Agency astronaut Paolo
Nespoli can be watched at: http://tinyurl.com/2be6w6k (UniverseToday.com)

+ More images, details on SpaceX's Dragon Flight are posted on-line at:
http://tinyurl.com/34dj7gt (UniverseToday.com)

+ Northern winter is beginning in a special way. On December 21, the win-
ter solstice, a lunar eclipse will be visible across all of North
America. Full story at: http://tinyurl.com/285grxy (nasa.gov)

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-353.07
Thanks for your support

AMSAT News Service Bulletin 353.07
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.07

Thank-You For Your Support - ARISSat-1 and FOX PayPal Widget Fundraising

AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA noted this week that, "We are just about to cross the $1000 mark on our PayPal fundraiser, and along with the $710 raised from the Facebook campaign, we are making a dent in recovering the funds spent on ARISSat-1 and those funds that will be spent on FOX."

Drew continued, "I want to thank those that donated, and those that took the time to add the widget to their webpages and QRZ profiles, and especially recognize two members who have excelled in creating exposure for our campaign. John Papay, K8YSE and Clint Bradford, K6LCS have pulled away from the pack in the number and amount of donations resulting from their copies of the widget, with $290 dollars raised between them. Gentlemen, thank you!"

Beginning with the $1250 mark, we will be randomly picking a donor from every $250 increment to receive an item from the AMSAT store. We currently have two different hats, a nice luggage tag, or a desktop thermometer/clock set to choose from, all bearing the AMSAT name and logo. Drew hopes to announce our first recipient soon!

In conclusion, Drew writes, "Thanks again, and if you'd like to donate to the campaign or share the widget to your own website, please visit http://www.amsat.org. The widget is on the front page below the ARISSat-1 news, and you can click on "Give" to donate, or "add to site" to receive the HTML code, or "supporters" to scroll through the statistics. I hope to soon see more familiar names scrolling across the widget soon, showing your support for AMSAT's next two satellites."

Donations, memberships, and store purchases may also be made through the AMSAT store on the website, or by calling Martha at 1 888 322 6728.

[ANS thanks AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. Remember to track Santa bringing you all the Happy Christmas Wishes from all the AMSAT volunteers giving their Time so willingly.

73,
This week's ANS Editor,

Dee Interdonato, NB2F

## 118. Automatic Doppler Compensation (BPSK setup)

Newsgroup: rec.radio.amateur.space
Date: 2010-12-20 23:39:06 UTC
From: Xama <xamalek@yahoo.com>
Message-ID: <d59ae88e-be43-4e4e-b64c-0db5ce5f5935@e16g2000pri.googlegroups.com>
Source record: 421

Hello,

I am interested in satellite communication. I would like to ask a few
questions.

* What radios provide Automatic Doppler Compensation?

* What (ground) radios provide this as well as 9600 BPSK modulation?

* What are the general methods for Automatic Doppler Compensation,
e.g. are radios software tunable perhaps through an RS-XXX port ???

Regards,
Xama

## 119. Re: Automatic Doppler Compensation (BPSK setup)

Newsgroup: rec.radio.amateur.space
Date: 2010-12-21 12:05:35 UTC
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Message-ID: <vl51h6ppbicq2srjrlf92o2madk27mbptj@4ax.com>
Source record: 422

Right now the Icom 910, and presumably the 9100, will do Doppler correction for 9600 baud. There are a few telemetry programs, little used now, which would do Doppler correction through the microphone up/down buttons. It looks as if the Flex-VU5K will have some sort of function, though that is not definite.

Doppler correction is normally done with external software through the CAT port. There are several program which do this with varying levels of sophistication. One of the most popular for Windows is SATPC32, and for the Mac, MacDoppler. There is at least one program for Linux, PREDICT.

--
Alan
WA4SCA

## 120. Re: Automatic Doppler Compensation (BPSK setup)

Newsgroup: rec.radio.amateur.space
Date: 2010-12-21 18:25:40 UTC
From: Xama <xamalek@yahoo.com>
Message-ID: <bf05ebe4-45f6-4e77-b423-55c58b962f8d@21g2000prv.googlegroups.com>
Source record: 423

On Dec 21, 4:05 am, Alan WA4SCA <WA4...@YAHOO.COM> wrote:
> Right now the Icom 910, and presumably the 9100, will doDoppler
> correction for 9600 baud.  There are a few telemetry programs, little
> used now, which would doDopplercorrection through the microphone
> up/down buttons.  It looks as if the Flex-VU5K will have some sort of
> function, though that is not definite.
>
> Dopplercorrection is normally done with external software through the
> CAT port.  There are several program which do this with varying levels
> of sophistication.  One of the most popular for Windows is SATPC32,
> and for the Mac, MacDoppler.  There is at least one program for Linux,
> PREDICT.
>
> --
> Alan
> WA4SCA

I think I understand this better now:

The CAT interface also known as the CAT port is the standard
controller/ancillary interface port found on transceivers. The
documentation I read states that it connects computers with ham radio
transceiver. Some transceivers have a built-in RS-232C interface a
serial cable which is good enough a straightforward computer
connection. However other transceivers have proprietary interfaces and
as such one would need a suitable circuit for controlling the
transceiver. The general recommendations state that one can get
suitable CAT interface control circuits directly from the manufacturer
of the equipment, or you can build it yourself ...

So what I understand is that if I want to do some automatic tuning, or
automatic Doppler compensation for a stream (that is BPSK encoded), I
would need some software that does this automatically, and use that to
control the transceiver.

You mentioned (G)Predict. Is there documentation on how to do this
automatic tuning using GPredict? What is the algorithm for automatic
tuning of a channel that is experiencing this? I assume that this
stuff just works out of the box with GPredict. I would like to learn
more about this and I guess I would need to read some more ARRL
literature and attend some of the local meetings ...

Any more comments, suggestions and the like would be helpful.

-Xa

## 121. Re: Automatic Doppler Compensation (BPSK setup)

Newsgroup: rec.radio.amateur.space
Date: 2010-12-22 02:37:55 UTC
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Message-ID: <roo2h61rgtigtqgtoof27to3o7i5dc0p3j@4ax.com>
Source record: 424

Xama,

Generally the CAT, or computer port, is a serial port. Some are
RS-232, others use TTL and need a level converter. Usually the
manufacturer sells a interface box if needed, or you can buy something
a lot cheaper on eBay.

General tracking programs do not do closed loop tuning. They
calculate the Doppler shift and tune appropriately. You need to fine
tune them a bit, but it works sup rising well, since most decoder
programs will allow a range of a few hundred Hz to lock up.

I would direct you to AMSAT though the ARRL does have some good
information. Look at:

WWW.AMSAT.ORG

for the US & Canada organization.

--
Alan
WA4SCA

## 122. SOMETHING SPECIAL FOR U

Newsgroup: rec.radio.amateur.space
Date: 2010-12-25 05:35:58 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <94c3a701-aafb-460f-8505-b700a56f6481@a28g2000prb.googlegroups.com>
Source record: 425

priyamani hot&sexy photos
http://karomasti9.blogspot.com/2010/12/priyamani.html
KATRINA SEXY PHOTOS
http://karomasti9.blogspot.com/2010/12/katrina.html
ANUSHKA HOT PHOTOS
http://karomasti9.blogspot.com/2010/12/anuska.html
BEAUTIFUL AISHWARIYA RAI
http://karomasti9.blogspot.com/2010/12/aiesh.html
TRISHA HOT PHOTOS
http://karomasti9.blogspot.com/2010/11/trisha-hot.html
AMISHAPATEL HOT VIDEOS
http://karomasti9.blogspot.com/search/label/amisha
HANSIKHA HOT SEXY PHOTOS
http://karomasti9.blogspot.com/search/label/HANSIKA
HOT SEXY COLLEGE GIRLS
http://karomasti9.blogspot.com/search/label/hot
BEAUTIFUL LARADATTA
http://karomasti9.blogspot.com/search/label/laradatta
NIKISHA HOT BOOBS
http://karomasti9.blogspot.com/search/label/nikisha
PRIYANKA SPICY LATEST PICS
http://karomasti9.blogspot.com/search/label/priyanka
ONLY FOR YOUTH
http://karomasti9.blogspot.com/search/label/spicy
SRILEKHA UNSEENED PHOTOS
http://karomasti9.blogspot.com/search/label/Srilekha
CHOPRA UNBELIVABLE PHOTOS
http://karomasti9.blogspot.com/search/label/chopra
HOT BIPASA BASU PHOTOS
http://karomasti9.blogspot.com/search/label/bipasa
TRISHA IN A SEXY FEEL
http://karomasti9.blogspot.com/search/label/thrisha
SRISHA HOT BOOBS SHOW
http://karomasti9.blogspot.com/search/label/srisha
BEAUTIFUL POONAM PHOTOS
http://karomasti9.blogspot.com/search/label/poonam

# 123. ANS-360 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2010-12-26 15:54:31 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000901cba515$2a46cb50$7ed461f0$@net>
Source record: 426
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-360

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISS 10th Anniversary
* SA AMSAT Announces Two Cubesat Projects
* New South Africa Space Agency Promises Support for Amateur Satellites
* First Winner Picked in AMSAT PayPal Fundraiser Drive
* SO-67 Repeater Temporarily Suspended
* Satellite Shorts From All Over
* ARISS Status - 20 December 2010

SB SAT @ AMSAT $ANS-360.01
ARISS 10th Anniversary

AMSAT News Service Bulletin 360.01
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.01

Frank Bauer, KA3HDO, who served as AMSAT's VP of Human Spaceflight for many years, took time to reflect on the 10th anniversary of the very first Amateur Radio on the International Space Station (ARISS) contacts.

My heartiest of congratulations to all the ARISS volunteers and their international sponsoring organizations on this, the 10th anniversary of the first Amateur Radio on the International Space Station (ARISS) school group contact.

It is breathtaking to see all that you have done this past decade. Ham radio operations on ISS started with the first Moscow/USA checkout contact on November 13, 2000-just 11 days after Expedition 1 took up residence on ISS. That paved the way for the historic first school contact between the students at the Burbank School in Burbank, Illinois and Bill

Shepherd, KD5GSL on December 21, 2000. Long-time ARISS volunteer Charlie Sufana, AJ9N, mentored that first contact.preparing the Burbank students, teachers and community for an activity that they will remember for the rest of their lives. Since then, the ARISS team's volunteer spirit and can-do attitude have kept the ARISS stations on ISS operational the entire decade--through all 26 crew expeditions. Over 560 schools or organizations have performed ARISS contacts -- inspiring tens of thousands of students and enabling millions and millions, worldwide, to experience the human spaceflight journey and to share in the excitement and camaraderie of the ham radio hobby. The international team has installed antennas and equipment in several ISS modules, deployed SuitSat, delivered ARISSat, and a school contact was a prominent "star" in the IMAX ISS 3D movie. Most importantly, you have inspired a legion of students to pursue careers in science, technology, engineering and math.

On my desk is a copy of NASA's "Reference Guide to the ISS." I recently noticed that on the back cover is a beautiful photograph of ISS with the Sun shining prominently on one of the ARISS antennas mounted on the Russian Service Module. That photograph reminds me of a story from the U.S. Constitutional Convention when statesmen Benjamin Franklin, looking towards the president's chair, at the back of which a rising sun happened to be painted, observed to a few members near him, that painters had found it difficult to distinguish in their art a rising sun from a setting sun. Franklin said "I have often looked at that behind the president without being able to tell whether it was rising or setting: But now at length I have the happiness to know that it is a rising and not a setting sun."

Indeed..the sun that shines over ARISS is a rising sun.

Congratulations to the ARISS international team and their sponsoring organizations!!

[ANS thanks Frank, KA3HDO, for the above information]

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SB SAT @ AMSAT $ANS-360.02
SA AMSAT Announces Two Cubesat Projects

AMSAT News Service Bulletin 360.02
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.02

This week SA AMSAT announced on their web page they plan to launch two satellite projects, both CubeSats but with totally different design approaches and time lines.

The first project will focus on providing a FM transponder that will be available on most passes over South Africa and will have a short

time line to launch.

The second project, called SAiSAT focuses on an innovative approach to the deployment of fold-out solar panels. The project is aimed at getting Master and Phd students involved in the development and design of various payloads and substructures. A detailed paper on SAiSAT will be released in the next two weeks on http://www.amsatsa.org.za

The FM Transponder CubeSat which has yet to be named will be based on a standard available space frame and sub system with a locally designed payload. The project will be coordinated by Hannes Coetzee, ZS6BPZ.

SA AMSAT is inviting radio amateurs who have an interest in satellites to join the project team. The team will meet for its first meeting on mid-January via a teleconference.

To participate in the project team, please send your full details, a description of your expertise in electronics, communication, satellite tracking, software design, antenna design and any other areas of experience that will support the project. In true amateur spirit participants must have enthusiasm. Besides technical experience the team also requires radio amateurs with management, financial, and communication skills.

Send your details to saamsat@intekom.co.za by 31 December 2010. You will be advised of the details of the teleconference in early January, 2011.

Both satellite projects will the subject of papers to be present at the SA AMSAT Space Symposium to be held on 26 March 2011.

[ANS thanks SA AMSAT for the above information]

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SB SAT @ AMSAT $ANS-360.03
New South Africa Space Agency Promises Support for Amateur Satellites

AMSAT News Service Bulletin 360.03
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.03

News posted on the SARL web (http://www.sarl.org.za) reported on the launch of the South African National Space Agency on December 9.

The Minister of Science and Technology, Naledi Pandor, said that SANSA is mandated as the primary, but not sole, implementer of South Africa's National Space Programme to direct Government's investment in space sciences and technology.

The purpose is to integrate and manage the country's space activities for the greater good and implement an effective, sustainable, long term, national space programme aligned with South Africa's socio-economic policies.

On a question by the SARL at the media briefing if SANSA will support amateur radio satellite programme, the CEO of SANSA said definitely. The Radio Amateurs are part of our plans.

[ANS thanks SARL for the above information]

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SB SAT @ AMSAT $ANS-360.04
First Winner Picked in AMSAT PayPal Fund raiser Drive

AMSAT News Service Bulletin 360.04
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.04

First Winner Picked in AMSAT PayPal Fund raiser Drive

Last week AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA announced an incentive plan being integrated into the AMSAT PayPal and Facebook fund raiser campaign. Drew wrote, "Beginning with the $1250 mark, we will be randomly picking a donor from every $250 increment to receive an item from the AMSAT store. I hope to announce our first recipient soon!"

This week Martha at the AMSAT office was privileged to announce the winner from the first $250 increment. Eric Schecter was our very first winner. He will have the choice of an AMSAT clock, hat or golf shirt. Hopefully, there will be more winners in the near future.

If you'd like to donate to the campaign or share the widget to your own website, please visit http://www.amsat.org. The widget is on the front page below the ARISSat-1 news, and you can click on "Give" to donate, or "add to site" to receive the HTML code, or "supporters" to scroll through the statistics.

Drew concludes, "I hope to soon see many more familiar names scrolling across the widget, showing your support for ARISSat-1 and Project Fox, AMSAT's next two satellites."

Donations, memberships, and store purchases may also be made through the AMSAT store on the website, or by calling Martha at 1 888 322 6728.

[ANS thanks AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA, and Martha at the AMSAT Office for the above information]

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SB SAT @ AMSAT $ANS-360.05
SO-67 Repeater Temporarily Suspended

AMSAT News Service Bulletin 360.05
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.05

Johann, ZR1CBC reports from South Africa that the flash boot memory of a CAN controller on Sumbandila was corrupted by a probable radiation event. It does not affect satellite health but prevents activation of the amateur radio repeater, as the particular script detects an anomaly and aborts.

The same problem also occurred in October of 2009 and was corrected. However, the fix requires time consuming effort, which cannot be exerted immediately.

SO-67 repeater activations are therefore suspended. We apologize for any disappointment and hope to return to normal operations somewhere in January.

[ANS thanks Johann, ZR1CBC for the above information]

/EX

SB SAT @ AMSAT $ANS-360.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 360.06
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.06

+ NASA Jet Propulsion Labs has an on-line slide show with views of the Earth varying with the seasons. See: http://tinyurl.com/26yqfun (jpl.nasa.gov)

+ Drew KO4MA demonstrates how circular downlinks are more elliptical, and have a preferred polarity. The same principles apply on the uplink too! You can get smarter by watching the video at: http://www.youtube.com/watch?v=XTqjQ9xIQQE

+ Terry G1WPR reports successful trans-Atlantic contacts via HO-68 with Nick, KB1RVT and Paul N2BX.

+ ClydeSpace has released a video showing the deployment of a sail which could be used to de-orbit a CubeSat. The first prototype of an aerobrake system being developed by Clyde Space and the Univers-ity of Glasgow can be seen at: http://tinyurl.com/2wlr3yh (SouthGate)

+ Matt, KF6RTB reports that the RAX Cubesat is recovering from a low battery charge condition. An anomaly last week that has severely re-duced RAX's power generation capability on her remaining three panels (the first panel shorted out). RAX will operate in two safe operating modes while engineering analysis is underway. You may copy infrequent

beacons (every 1-2 minutes) or beacons off to regain energy spent on testing.

+ Luciano Fabricio, PY5LF, has produced a video showing reception of the two Amateur Radio FASTRAC satellites, Sara Lily and Emma on 145.825 and 437.345MHz FM: http://tinyurl.com/34d58y5 (SouthGate)

+ Luis, LU6QI is trying to attempt a QSO with USA via AO7 or FO29. He thinks it could be possible with stations in Florida. Contact Luis by e-mail at lquintas@unsl.edu.ar to set up schedules.

+ Sebastian, W4AS found this news on-line on the ARRL LoTW web page: Dec 22, 2010 VUCC Award Support Testing - VUCC support is being installed and tested. When this upgrade is implemented, amateurs can use LoTW to apply for awards based on Maidenhead grid squares, such as VUCC and the Fred Fish Memorial Award.

+ AMSAT has received news from Captain Yuri Bodrov, UT1FG/MM, Master of the MV "Mottler" he is still operating through all satellites from the ocean "wet grid squares" on his sea voyage. Presently he in Coquimbo, Chile and expects to depart on December 23 enroute to Huelva, Spain and Brunsbuttel, Germany via the Panama Canal. This route will enable him to operated FG-FH-EH-EI-EJ-FJ-FK-GK-GL-HL-HM-IM-IN-IO-JO "wet grids". Yuri estimates he will be in satellite range for US stations beginning December 24. He will transit the Panama Canal on January 3.

+ Update your ISS keps. Russia's Mission Control raised the orbit of the International Space Station (ISS) on Wednesday, December 22 by raising it 4.2 kilometers (2.6 miles). The readjustment is necessary to ensure the best conditions for the docking of Russia's Progress M-09M space freighter and the U.S. Discovery's final mission to the ISS.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-360.07
ARISS Status - 20 December 2010

AMSAT News Service Bulletin 360.07
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.07

1. Upcoming Contacts

The ARISS operations team is working to schedule school contacts for the next year. Paolo Nespoli, IZ0JPA and Cady Coleman, KC5ZTH arrived at the ISS on Friday, December 17. Both plan to be active in the ARISS program.

2. Astronaut Training Status

Astronaut Tom Marshburn, KE5HOC attended an ARISS introduction course this past week. Marshburn is slated to fly with Expedition 34 in November 2012.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor, wishing everyone a happy new year,
Lee McLamb, KU4OS